



सत्यमेव जयते

Ministry of Ayush
Government of India

STANDARD TREATMENT GUIDELINES
ON
**MANAGEMENT OF
DERMATOLOGICAL DISORDERS**
IN
AYURVEDA SYSTEM OF MEDICINE

AYUSH VERTICAL
DIRECTORATE GENERAL OF HEALTH SERVICES

Ministry of Health & Family Welfare
Government of India

STANDARD TREATMENT GUIDELINES
ON
MANAGEMENT OF
DERMATOLOGICAL DISORDERS
IN
AYURVEDA SYSTEM OF MEDICINE

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आयुष मंत्रालय और
राज्य मंत्री
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
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Minister of State
(Independent Charge) of
Ministry of Ayush and
Minister of State in
Ministry of Health and Family Welfare
Government of India

प्रतापराव जाधव
PRATAPRAO JADHAV



Message

India's rich heritage of traditional healthcare systems has long provided holistic, time-tested solutions for the prevention, management, and promotion of health. In recent years, there has been growing recognition of the significant role that Ayush systems can play in addressing the increasing burden of skin diseases through patient-centric, and integrative healthcare approaches.

The release of the Standard Treatment Guidelines (STGs) for Dermatological Disorders in the respective Ayurveda, Siddha, Unani, and Homeopathy (ASUH) systems, with the inclusion of Yoga, marks another important milestone in our collective efforts to strengthen the integration of Ayush systems into the national healthcare framework. Building upon the success of the previously released STGs, these guidelines reaffirm our commitment to harmonizing the wisdom of traditional medicine with contemporary scientific evidence, thereby enhancing the quality, safety, and accessibility of healthcare services.

These guidelines provide evidence-based recommendations for the prevention, diagnosis, and management of common dermatological disorders, including Psoriasis, Dermatitis, Vitiligo, Urticaria, and Dermatophytosis. By offering standardized and system-specific clinical guidance, they will support healthcare practitioners in delivering safe, effective, and holistic patient care while promoting rational and evidence-informed clinical practice.

I am confident that these STGs will contribute significantly to improving clinical outcomes, encouraging integrative models of healthcare, and strengthening the role of Ayush systems in Public health sector. They will also serve as valuable reference documents for clinicians, academicians, researchers, and policymakers, fostering greater uniformity and excellence in patient care across the country.

I wholeheartedly appreciate the dedicated efforts of Ayush Vertical under DGHS as well as all the experts, institutions, researchers, and stakeholders whose invaluable contributions have made the development of these comprehensive guidelines possible. I am confident that this initiative will further strengthen the vision of accessible, affordable, and quality healthcare for all through the Ayush systems of medicine.



(Prataprao Jadhav)

14th August 2026
New Delhi

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Foreword

Dermatological health is an integral part of overall well-being, as skin disorders can have significant physical, psychological and social impacts. The increasing burden of chronic and recurrent dermatological conditions highlights the need for comprehensive and patient-centred approaches that extend beyond symptom management to encompass prevention, long-term care, and improved quality of life. In this context, the Ayush systems offer a distinctive and comprehensive perspective on health, emphasizing the role of appropriate lifestyle practices, dietary measures, and individualized care. The integration of validated Ayush interventions with contemporary healthcare approaches can contribute towards strengthening accessible, inclusive, and holistic dermatological care.

I am pleased to note that the Ayush Vertical under the Directorate General of Health Services (DGHS), Ministry of Health & Family Welfare, in close collaboration with the Central Research Councils under the Ministry of Ayush and eminent experts from the respective systems, has developed these *Standard Treatment Guidelines (STGs) for Dermatological Disorders including psoriasis, dermatitis, vitiligo, urticaria, and dermatophytosis*. The guidelines are the outcome of a rigorous and systematic process involving extensive expert consultations, critical appraisal of classical texts, evaluation of contemporary scientific evidence, and consensus-based deliberations.

These guidelines provide practical recommendations for the prevention, diagnosis, treatment, follow-up and rehabilitation of common dermatological disorders while preserving the fundamental principles of each Ayush system. They are expected to promote greater uniformity in clinical practice, facilitate rational decision-making, and encourage appropriate integrative healthcare in public health sector. These STGs will also serve as a valuable reference for education, capacity building, research, and the generation of high-quality clinical evidence, thereby further strengthening the scientific foundation of Ayush healthcare.

The Government of India remains committed to evidence-based integration, quality assurance and standardisation across the Ayush sector. These guidelines are an important step towards strengthening Ayush's contribution to accessible, affordable and people-centric healthcare.

I congratulate the Ayush Vertical under DGHS and appreciate the contributions of the Central Research Councils, experts, clinicians, academicians, researchers and other stakeholders. I am confident that these guidelines will serve as a valuable resource for healthcare professionals and further strengthen the quality, credibility and global acceptance of Ayush systems of medicine.

(Rajesh Kotecha)

Date: 25th August, 2026

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स्वास्थ्य सेवा महानिदेशक
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भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
स्वास्थ्य सेवा महानिदेशालय
Government of India
Ministry of Health & Family Welfare
Directorate General of Health Services



Message

The growing global emphasis on holistic, preventive, and patient-centred healthcare has renewed interest in traditional systems of medicine and their potential contribution to contemporary health challenges. In India, the Ayush systems of medicine have long served as an integral component of healthcare delivery, offering comprehensive approaches to health promotion, disease prevention, and management through their time-tested principles and evidence-informed practices. As healthcare increasingly embraces integrative models of care, the role of Ayush in addressing both communicable and non-communicable diseases assumes even greater significance.

Dermatological disorders constitute a significant public health challenge, affecting individuals across all age groups and contributing substantially to morbidity, psychological distress, social stigma, and reduced quality of life. A wide spectrum of skin conditions such as dermatitis, dermatophytosis, psoriasis, urticaria, and vitiligo are frequently encountered in clinical practice and require safe, effective, and patient-centered management strategies. The Ayush systems of medicine offer holistic and individualized approaches to the management of dermatological disorders by addressing the underlying constitutional imbalances, promoting healthy dietary and lifestyle practices, and utilizing evidence-informed therapeutic interventions.

The Standard Treatment Guidelines (STGs) on Dermatological Disorders in Ayush Systems of Medicine have been developed under the aegis of the Ayush Vertical, Directorate General of Health Services. These guidelines represent a significant step towards promoting quality assurance, uniformity in clinical practice, and evidence-based healthcare delivery across the Ayush streams. Formulated through a rigorous consultative process involving experts from Ayurveda, Siddha, Unani, and Homoeopathy, along with specialists from modern medicine, the guidelines provide practical and clinically relevant recommendations for the management of common dermatological conditions.

I commend the Ayush Ministry, for bringing out this important document and express my sincere appreciation to the experts from the Research Councils and National Institutes under the Ministry of Ayush for their valuable contributions. I also acknowledge the support extended by the dermatology departments of Dr. Ram Manohar Lohia Hospital and Lady Hardinge Medical College.

By fostering greater collaboration among different systems of medicine and encouraging a multidisciplinary approach to healthcare, these guidelines exemplify our collective commitment to improving patient outcomes and strengthening integrative healthcare delivery in the country. I am confident that these Standard Treatment Guidelines will serve as a valuable reference for Ayush practitioners.


(Loveneesh G Krishna)

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उप महानिदेशक (आयुष)

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Ministry of Health and Family Welfare

Government of India

FOREWORD

The standardization of clinical practice is fundamental to ensuring quality, safety, and consistency across healthcare delivery systems. Recognizing this imperative, the Ayush Vertical, under the leadership and guidance of the Directorate General of Health Services (DGHS), initiated the systematic development of Standard Treatment Guidelines (STGs) for common clinical conditions across traditional systems of medicine. Building upon the successful publication of our earlier volumes on Musculoskeletal and Metabolic Disorders, I am pleased to present the third set in the series: **Standard Treatment Guidelines for Dermatological Disorders**.

This volume addresses five commonly encountered clinical entities—Psoriasis, Dermatitis, Vitiligo, Urticaria, and Dermatophytosis. These guidelines are designed to assist Ayush practitioners in delivering standardized, evidence-informed, and safe clinical care while preserving the foundational diagnostic and therapeutic principles of Ayurveda, Siddha, Unani, and Homeopathy. Beyond routine clinical application, this document aims to foster consistency in practice, enhance quality assurance, support capacity building, and provide a framework for future epidemiological and clinical research.

The preparation of these guidelines underscores the steadfast commitment of the Ayush Vertical to institutionalizing quality assurance within public health services. Developed through an extensive collaborative mechanism, this document brings together technical expertise from the Ayush Research Councils, senior academic specialists across all four traditional streams, and distinguished experts from modern medical specialties. This interdisciplinary approach ensures that the protocols remain deeply rooted in classical wisdom, scientifically robust, and aligned with modern public health standards.

A defining strength of this publication is its rigorous, field-level validation. To ensure operational feasibility in real-world clinical environments, the Ayush Vertical, in active collaboration with the Directorate of Ayush, Government of NCT of Delhi, conducted comprehensive field testing of the draft protocols. Medical Officers engaged in primary and secondary healthcare delivery tested the guidelines in their daily practice, providing critical operational feedback. Inclusion of their observations in the final publication has significantly enhanced its clinical relevance and practical utility.

I place on record my sincere gratitude to the members of the National Expert Committee, the Editorial Board, subject experts from the Ayush Research Councils, modern medicine specialists, the Directorate of Ayush (NCT of Delhi), and all participating Medical Officers. Their technical rigor, dedication, and spirit of collaboration have been crucial in bringing this project to fruition.

I am confident that the *Standard Treatment Guidelines for Dermatological Disorders* will serve as an authoritative reference for clinicians, academic faculties, researchers, and public health administrators. It is our earnest hope that this effort will further strengthen the delivery of accessible, safe, and quality-driven Ayush healthcare services to the nation.

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ABBREVIATIONS

AD	Atopic Dermatitis
ADSI	Atopic Dermatitis Severity Index
ANA	Antinuclear Antibody
ACE	Angiotensin-Converting Enzyme
AIDS	Acquired Immunodeficiency Syndrome
ASST	Autologous Serum Skin Test
BMI	Body Mass Index
BSA	Body Surface Area
CBC	Complete Blood Count
CDLQI	Children Dermatology Life Quality Index
CCRH	Central Council for Research in Homoeopathy
CT scan	Computed Tomography Scan
CHC	Community Health Centre
CRP	C-Reactive Protein
CSU	Chronic Spontaneous Urticaria
CIndU	Chronic Inducible Urticaria
CVD	Cardiovascular Disease
DALYs	Disability-Adjusted Life Year
DLQI	Dermatology Life quality Index
DSQL	The Dermatology-specific Quality of Life
DOPA	Levodopa
DVT	Deep Vein thrombosis
EASI	Eczema Area and Severity Index
ECHO	Echocardiography
ECG	Electrocardiogram
ESR	Erythrocyte Sedimentation Rate
FT3	Free Tri-iodothyronine
FT4	Free Thyroxine
FBS	Fasting Blood Sugar
HBA1C	Glycosylated Haemoglobin
HIV	Human Immunodeficiency Virus
HLA	Human Leukocyte Antigen
HSV	Herpes Simplex Virus
HAE	Hereditary Angioedema

IgE	Immunoglobulin E
ICD	International Classification of Diseases
IFN	Interferon
JAK/STAT	Janus Kinase/Signal Transducer and Activator of Transcription
KFT	Kidney Function Test
KOH	Potassium Hydroxide
LFT	Liver Function Test
MRI	Magnetic Resonance Imaging
NSV	Non-Segmental Vitiligo
NSAIDS	Non-Steroidal Anti-Inflammatory Drugs
PASI	Psoriasis Area Severity Index
PCR	Polymerase Chain Reaction
PHC	Primary Health Centre
PPD	Purified Protein Derivative
PPBS	Postprandial Blood Sugar
QOL	Quality of Life
RAST	Radioallergosorbent Test
RA Factor	Rheumatoid Factor
RO	Research Officer
SARDs	Systemic Autoimmune Rheumatic Disorders
SAPHO	Synovitis, Acne, Pustulosis, Hyperostosis, Osteitis
SASSAD	Six Area Six Sign Atopic Dermatitis
SCORAD	Scoring Atopic Dermatitis
SLE	Systemic Lupus Erythematosus
SV	Segmental Vitiligo
TSH	Thyroid-Stimulating Hormone
USG	Ultrasonography
UV	Ultraviolet
VASI	Vitiligo Area Scoring index
VES	Vitiligo Extent Score
VETF	Vitiligo European Task Force
VIDA	Vitiligo Disease Activity Score
VIS	Vitiligo Impact Scale
WHO	World Health Organisation

GLOSSARY

Term	Definition
Abhyanga	Therapeutic massage using medicated oils in Ayurveda
Adhishtana	Primary site or seat of disease manifestation
Agnideepana	Therapy aimed at stimulating digestive and metabolic fire (Agni)
Agni	Digestive and metabolic energy in Ayurveda
Agnimandya	Reduced digestive/metabolic activity
Ahara	Diet or food intake
Ajeerna	Indigestion
Alpa Kandu	Mild itching
Ama	Toxic, improperly digested metabolic waste believed to contribute to disease formation
Ama Pachana	Digestion and elimination of Ama
Anuloma	Proper downward movement of Vata
Anulomana	Therapy promoting normal bowel movement and Vata flow
Apathya	Unwholesome diet or lifestyle practices
Arishta	Fermented Ayurvedic herbal preparation
Atikandu	Severe itching
Atiruja	Severe pain
Avarana Vata	Obstruction of normal movement of Vata dosha due to blockage in body channels.
Bahusrava	Excessive discharge or oozing from lesions
Bahya Rogamarga	External pathway/site of disease manifestation
Bala	Strength or vitality of an individual
Bheda Avastha	Complication stage of disease
Chikitsa	Treatment or therapy
Daha	Burning sensation
Darshana	Inspection during clinical examination
Dhara	Continuous pouring of medicated liquids over the body/head
Dhatu	Body tissues in Ayurveda
Dhatu Dushti	Vitiation of body tissues
Dhatvagni	Metabolic activity at tissue level
Dinacharya	Daily healthy routine
Dosha	Fundamental bio-energies: Vata, Pitta, Kapha

Term	Definition
Dosha-Dushya Sammurchana	Interaction between vitiated doshas and tissues causing disease
Dushivisha	Latent or cumulative toxins in the body
Garavisha	Artificial or low-grade accumulated toxins
Ghrita	Medicated ghee preparation
Guda	Jaggery
Jaloukavacharana	Leech therapy used for bloodletting
Jatharagni	Main digestive fire
Kapha	Dosha associated with structure, moisture, and stability
Kandu	Itching
Kashaya	Herbal decoction
Kledahara	Therapy reducing excessive moisture or exudation
Kotha / Utkotha	Eruptive itchy skin lesions with swelling.
Krimi	Microorganisms/parasites
Ksudra Kustha	Minor skin diseases in Ayurveda
Kustha	Broad Ayurvedic category for skin disorders
Lasika	Lymphatic/watery discharge
Lasikadhya	Excessive watery discharge
Lepa	Medicinal paste applied externally
Madhutailika Basti	Special medicated enema used for disorders involving Vata and metabolic disturbances.
Madhyama	Moderate grade or severity
Mandagni	Weak digestive fire
Manasika Prakriti	Psychological constitution
Marsha Nasya	Administration of medicated oil through nostrils
Nasya	Nasal administration of medicines
Nidana	Cause of disease
Nidana Parivarjana	Avoidance of disease-causing factors
Pachana	Digestion of Ama/toxins
Pathya	Wholesome diet and lifestyle
Pathya-Apathya	Do's and don'ts regarding food and lifestyle.
Peyadi Karma	Graduated post-purification dietary regimen
Pidika	Papular eruptions
Pitta	Dosha associated with heat and metabolism

Term	Definition
Pradhana	Predominant
Prakriti	Individual body constitution
Prana Anulomana	Regulation of respiratory and Vata functions
Prasara	Spread stage of disease
Prashana	Interrogation/history taking
Prachhana	Scarification procedure for bloodletting
Purificatory Therapy (Shodhana)	Cleansing therapies to eliminate vitiated doshas
Raji	Linear markings or lesions
Rakta	Blood tissue
Raktadushti	Vitiation of blood tissue
Raktamokshana	Bloodletting therapy
Rasayana	Rejuvenative therapy promoting tissue strength and immunity
Roga Shamana	Palliation or subsiding of disease
Rukshata	Dryness
Samagni	Balanced digestive fire
Samana Sneha	Small dose of internal oleation used therapeutically.
Samprapti	Pathogenesis of disease
Samprapti Vighatana	Breaking the disease process
Samsarjana Krama	Post-purification dietary rehabilitation
Samyaksnigdha Lakshana	Signs indicating proper internal oleation has been achieved.
Sanga	Obstruction in body channels
Sarpipana/Ghritapana	Internal oleation using ghee
Satmya	Habitual suitability or adaptability
Shamana Chikitsa	Palliative treatment
Shithila Dhatu	Loosened/weakened tissues
Shodhana Chikitsa	Purification therapies
Shotha	Swelling or oedema
Sheetapitta	A condition resembling urticaria/hives with itching, redness,
Shyava	Blackish or greyish discoloration
Siravedha	Venesection/bloodletting procedure
Snehapana	Internal oleation therapy
Srotas	Channels in the body

Term	Definition
Srotodushti	Pathology of body channels
Srotoshodhana	Cleansing of body channels
Sramsana	Mild purgative therapy
Swedana	Sudation/fomentation therapy
Takradhara	Therapeutic pouring of medicated buttermilk over forehead/body
Tikshagni	Strong digestive fire
Tridosha	Collective term for Vata, Pitta, and Kapha
Twak	Skin
Udarda	Skin disorder similar to urticaria, often associated with itching and
Udakavaha Srotas	Channels carrying body fluids
Upashaya-Anupashaya	Factors causing relief or aggravation
Vamana	Therapeutic emesis
Vata	Dosha governing movement and nervous functions
Vicharana Snehapana	Long-term intake of small quantities of medicated ghee/oil or co-administration of unctuous substance in various forms; methods of inducing oleation by administering various unctuous substances along with food or medicine or from other par-enteral route
Vidahi Ahara	Foods causing burning sensation/acidity
Vimargagamana	Abnormal movement through channels
Viruddhahara	Incompatible food combinations
Visarpa	Rapidly spreading inflammatory skin disorder
Virechana	Therapeutic purgation
Visha	Poison/toxin
Vishamagni	Irregular digestive fire
Vyadhiviparita Chikitsa	Disease-specific treatment
Vicharchika	Ayurvedic skin disorder correlated with dermatitis/eczema
Yapya	Disease manageable but not completely curable; requires long-term control.

DERMATITIS

(विचर्चिका)

DERMATITIS

ICD 10 code: L20–L30
ICD 11 Code: EA80–EA87
ICD 11 TM2

- Dermatitis- SN40
- Eczema-SN43

National Ayurveda Morbidity Code

ED-4.310- विचर्चिका
ED-4 कुष्ठम्
ED-4.2.4 मण्डलकुष्ठः/कफजकुष्ठः
ED-4.3.4 विपादिक
ED-4.3.3 किटिभः
ED-10 विसर्पः
PD दूषीविषः/कृत्रिमविषः
ED-8.2 उत्तान-वातरक्तम्
ED-8.3 गम्भीर-वातरक्तम्

CASE DEFINITION

Dermatitis refers to inflammation of the skin resulting in erythema, itching, edema, and vesiculation, often followed by crusting and scaling. It includes a broad spectrum of disorders such as atopic dermatitis, contact dermatitis (irritant/allergic), seborrheic dermatitis, nummular dermatitis and dyshidrotic dermatitis.^{1,2}

Vicharchika is one among the eighteen types of integumentary diseases enlisted in the classical textbooks of Ayurveda. It is classified as a *Ksudra Kustha*, ie minor skin disease. This skin disorder is characterized by mild to intense itching, papular eruptions, blackish/greyish discoloration and excessive discharge with the predominant involvement of *Kapha Dosha* in general.^{3,4}

INTRODUCTION (Incidence/Prevalence, Morbidity/Mortality/Risk Factors)^{1,2,5,6,7,8,9,10,11,12}

- Atopic dermatitis affects up to 20% of children and around 10% of adults globally, with increasing prevalence in industrialized nations.
- Contact dermatitis accounts for nearly 70% of occupational skin diseases worldwide.
- Seborrheic dermatitis is estimated to affect 1–5% of the general population but may exceed 85% in HIV-infected individuals.
- Nummular dermatitis represents approximately 0.2–0.5% of dermatology cases, while dyshidrotic dermatitis constitutes 5–20% of hand eczema cases globally.
- In India, similar prevalence patterns are observed, with a significant burden of atopic and contact dermatitis, particularly among industrial workers and urban populations.

- Morbidity includes chronic pruritus, secondary infections, sleep disturbances, and psychological impact, although mortality is exceedingly rare.
- Key risk factors across these types of dermatitis include genetic predisposition, atopic background, impaired epidermal barrier, exposure to irritants or allergens, microbial dysbiosis, emotional stress, and environmental factors.
- Dermatitis may be entirely endogenous (constitutional) or be entirely exogenous (contact). The latter consists of irritant and allergic contact reactions. Commonly, dermatitis has a multifactorial aetiology and may be aggravated by the presence of pathogens (staphylococcus aureus). Assessment of the relative importance (contribution) of the possible factors may be difficult and subjective.

Dermatitis/eczematous conditions can be considered under *Vicharchika* in Ayurveda. *Vicharchika* is a disease caused by the vitiation of *tridosha* with the predominance of *Vata* and *Kapha*. *Acharya Sushruta* mentions a *Vicharchika* type with *Pitta* dominance also, where there is minimal discharge, excessive itching and pain, and linear skin-lesions (*अल्पस्रावतिकण्ड्वर्तिरुजान्वितराजिमती विचर्चिका पित्तेन*). As per *Kustha Samprapti*, the three doshas provoked by the particular nidanas creates *shaithilya* of *Twak*, *Rakta*, *Mamsa* and *Lasika Dhatus*. Further vitiation of doshas causes accumulation in the *Shithila Dhatus* resulting in *Dosh Dushya Samoorchana*. Based on the level of *dosha-dushya* involvement, various skin diseases such as *Vicharchika* are manifested. *Dushivisha* as well as *Raktadushti* may also play roles in manifestation of *Kustha* including *Vicharchika*.

CLINICAL PRESENTATION ^{1,2,5,6,7}

Table 1: Clinical features of different types of dermatitis

Type of Dermatitis	Clinical Features	Investigations	Appearance
Atopic Dermatitis	• Chronic, relapsing pruritic eczematous lesions, often involving flexural areas (elbows, knees, neck), with lichenification, xerosis • Intense itching, red, scaly or oozing, crusting, cracked and thickened skin lesions, sometimes bleeding on scratching • Commonly affects children below the age of five years • Dennie-Morgan folds under eyes (Dennie-Morgan folds, also known as Dennie-Morgan lines or infraorbital folds, are horizontal	• Serum IgE level (often elevated) • Absolute eosinophil count • Skin swab test • Patch test if contact allergy suspected • Skin biopsy in atypical cases	 Fig1¹²

Type of Dermatitis	Clinical Features	Investigations	Appearance
	creases or folds that appear under the eyes). White dermatographism is a skin response in which gentle pressure from a blunt object—such as a fingernail or tongue depressor—produces a pale or whitish streak on the skin, rather than the typical red mark seen in normal reactions.; • Personal/family history of asthma, allergic rhinitis common.		
Irritant Contact Dermatitis	• Localized erythema, scaling, rough, inflamed skin often with burning, fissuring at site of repeated chemical or physical insult (soaps, detergents, occupational irritants); • Often painful more than itchy, without spreading beyond contact area.	• Mainly clinical diagnosis • Skin swab test for secondary infection • Patch test (negative, helps exclude allergic dermatitis) • Skin biopsy if diagnosis uncertain	 Fig 2¹²
Allergic Contact Dermatitis	• Erythema, vesicles, intense pruritus, often spreading beyond direct contact zone due to delayed type IV hypersensitivity; • Chronic cases show lichenification.	• Patch Test • Skin swab test • Skin biopsy	 Fig 3¹²
Parthenium Dermatitis	• Parthenium dermatitis is a widespread and distressing dermatoses in rural and urban India caused by the air borne allergen of the Compositae weed <i>Parthenium hysterophorus</i>. Parthenium dermatitis has been thought to be mediated solely by	• Patch test with parthenium antigen • Skin swab test in cases of secondary infection • Serum Ig levels • Skin biopsy if required	 Fig 4³⁸

Type of Dermatitis	Clinical Features	Investigations	Appearance
	type IV hypersensitivity, but recently a combined immediate (type I) and delayed (type IV) hypersensitivity mechanism has been postulated in the initiation and perpetuation of parthenium dermatitis, especially in sensitized subjects with an atopic diathesis.		
Seborrheic Dermatitis	- Erythematous plaques with greasy, white or yellowish scales or crust on scalp (dandruff), eyebrows, beard, retro-auricular area, sternum; - May cause mild pruritus. - Exacerbates in cold weather, stress, common in Parkinsonism and HIV patients.	- Usually clinical diagnosis - KOH examination - Skin swab test - Skin biopsy if atypical	 Fig 5¹²
Nummular Dermatitis	- Well-demarcated, round to oval “coin-shaped” eczematous plaques, often exudative or crusted, primarily on legs and arms; - Intense pruritus; - Commonly in middle-aged to elderly men; - Winter aggravation.	- KOH examination - Skin swab test - Patch test - Skin biopsy	 Fig 6¹³
Stasis Dermatitis	- Develops in the lower legs due to poor circulation from conditions like varicose veins leading to skin discolouration, thickening & leg swelling. - Reddish, brownish or grayish skin discolouration with itching, oozing, crusting or thickening. - Signs of chronic leg swelling	- Venous Doppler ultrasound of lower limb (to assess venous insufficiency) - Skin swab test if ulcer or infection - Skin biopsy	 Fig 7³⁶

Type of Dermatitis	Clinical Features	Investigations	Appearance
Neurodermatitis (Lichen Simplex Chronicus)	Localized, itchy skin condition characterized by thickened, leathery, and scaly skin caused by a habitual itch-and-scratch cycle.	- Clinical diagnosis - Skin swab test - Patch test - Skin biopsy	 Fig 8³⁷
Dyshidrotic Dermatitis (Pompholyx)	- Sudden onset of deep-seated tapioca-like vesicles on lateral aspects of fingers, palms, sometimes soles; - Associated with burning, itching; may fissure; - Often triggered by stress or hot weather, frequent recurrences. - Also known as 'Pompholyx'.	- KOH examination to rule out fungal infection - Skin swab test - Patch test - Skin biopsy	 Fig 9¹²

Clinical Presentation of *Vicharchika* ¹³

Clinical presentation of *Vicharchika* includes *Kandu/ Atikandu* (Itching), *Pidika* (Papular eruption), *Shyava* (Blackish/greyish discolouration), *Bahusrava* (Excessive/copious discharge), *Lasikadhya* (Excessive watery discharge), *Atiruja* (Excessive pain) and *Raji* (Manifestation of linear lesions)

CLINICAL EXAMINATION¹⁴

A detailed patient's history should be taken and focus on the following:

- Onset and distribution of lesions
- Inspection to identify skin rashes, redness, dryness, scaling, crusting, discolouration, thickening and other signs of irritation.
- The severity of pruritus (e.g., keeping patient awake at night)
- Family and/or personal history of the atopic triad. (Atopic triad refers to the genetic predisposition to develop allergic conditions such as atopic dermatitis, allergic asthma, allergic rhinitis and other allergies like conjunctivitis)
- Presence of contact allergens
- The presence of triggers including allergens (e.g., dust mites, animal dander), hot showers/sweating, soaps, fragrances, food hypersensitivities, and synthetic fabrics such as polyester.

Classic physical examination findings of Atopic Dermatitis (depend on the age group).

- Infants develop oedematous papules and plaques that may have vesicles or crust on the scalp, face, and extensor extremities.

- Infants rarely have atopic dermatitis lesions affecting the diaper area but may be susceptible to other causes of diaper dermatitis such as candida or seborrheic dermatitis.
- Atopic dermatitis children classically have fewer exudative patches and plaques on antecubital and popliteal fossae; adults have chronic lichenified (enhanced skin markings) lesions that have a predilection for hands.
- Individual lesions may also be further classified into acute (oedematous, erythematous papules and plaques and/or vesicles/crusting), subacute (erythema, scale, variable crusting), or chronic (thick plaques with lichenification and scale) stages.

Clinical diagnosis as per Ayurveda

Darshana (Inspection) – Site of manifestation, *Pidika, Shyava, Bahusrava* etc

Sparshana (Palpation) – *Rukshata, Kharata* etc

Prashna (Interrogation) - *Desha, Vaya, Kaal, Kandu, Ruja* etc

Pariksha:

1. *Dushya* – *Dhatu, Mala* (*Sapta Dushyas* of *Kustha* - *Tvaka, Rakta, Mamsa, Lasika, Tridosha*)
2. *Desha* - Site of manifestation/ geographical habitat
3. *Bala* – *Pravara/Madhyam/ Avara*
4. *Kala*– Season/ condition of Skin (*Navam/ Purana*)/ *Sanchaya, Prokopa, Prasara, Sthanasanshraya, Vyakta, Bheda Avastha*
5. *Agni* –
 - *Jatharagni* - *Mandagni/Samagni/Tikshagni/Vishamagni* and *Pravara/Madhyam/ Avara*
 - *Dhatavagni* - *Pravara/Madhyam/ Avara*
6. *Prakriti* - *Sharirika* and *Manasika Prakriti*
7. *Vayas* – *Balya/Madhyama/ Jirna*
8. *Satva* - *Pravara/Madhyam/ Avara*
9. *Satmya* – *Rasasatmya/ Okasatmya* and *Pravara/Madhyam/ Avara*
10. *Ahara* – Digestive capacity

Other factors to be considered before finalizing the treatment:

- *Dosha* Involvement – *Vata, Pitta, Kapha*
- Involvement of *Raktadushti, Dushivisha, Garavisha*
- *Vata* – *Anuloma/ Pratiloma*
- *Srotodushti*
- Misbehaviours/ Misdeeds done in the past may cause guilt feeling/ stress that can initiate or precipitate a *Kusthasamprapti* – This may be enquired during history taking.
- *Dhatu*s affected – From the symptoms enumerated for each *Dhatugata Kustha*, and also from the symptoms listed for each *Dhatu Dushti*, the *Dhatu*s affected are to be inferred and treatment should be planned.

DIFFERENTIAL DIAGNOSIS^{5,6}

(Table 2)

Condition	Differential Features	Investigations
Psoriasis	- Chronic plaques with sharply demarcated edge, - Thick silvery scales typically on extensor elbows, knees, scalp; - Auspitz sign (pinpoint bleeding when scale removed) positive, nail pitting, possible arthritis;	- Skin biopsy showing acanthosis, parakeratosis, - Munro micro abscesses.
Scabies	- Intense nocturnal pruritus with small erythematous papules, vesicles, burrows (thin wavy lines), often on finger webs, wrists, waist, genitalia; - Excoriations, secondary impetiginization; - Family members frequently affected.	Skin scraping with KOH or mineral oil showing mites, eggs, or feces.
Tinea corporis	- Annular erythematous plaques with raised scaly advancing margins and central clearing, possible vesicles at periphery; - Worse in humid weather - Usually asymmetrical; - History of pets or communal sports.	KOH mount positive for septate branching hyphae.
Drug eruptions	- Rapid onset of widespread symmetric erythematous macules, papules,, commonly starting on trunk, with recent drug exposure; - May involve mucosa if severe.	- Clinical history; - skin biopsy shows superficial perivascular lymphocytic infiltrate.
Lichen planus	- Pruritic, purple, polygonal, planar papules with Wickham striae (white lacy lines), - Commonly on flexor wrists, lumbar area, ankles; - Oral lesions appear as reticulate white patches; - May have nail thinning or longitudinal ridging.	Biopsy reveals saw toothed hypergranulosis, basal cell vacuolisation, with band like lymphocytic infiltrate at the epidermal junction and civatte bodies.
Insect Bite/ Insect bite hypersensitivity/ Bed bug infestations	- Common in children, chronic hypersensitivity to bites - Localized reactions: - Itchy, erythematous papules or wheals - Central punctum may be present - May progress to vesicles or bullae - Itchy erythematous papules, often in lines or clusters - May have central punctum or sometimes contain a clear fluid	--

Condition	Differential Features	Investigations
Dermatophytid reaction	- Symmetric itchy papules or vesicles on hands or feet secondary to fungal infection elsewhere on body (e.g., tinea pedis); - Often bilateral or symmetrical; - lesions themselves are KOH negative, - improve after primary fungal infection is treated.	- KOH negative at eruption site, - Positive at primary infection site.
Asteatotic eczema	- Very dry, cracked, fissured skin especially on lower legs in elderly during winter; - fine scaling without well-defined plaques, minimal erythema, mild itching.	Clinical diagnosis based on morphology and seasonality.
Pityriasis rosea	- Begins with single large herald patch on trunk followed by multiple smaller oval salmon-colored lesions along cleavage lines (Christmas tree pattern); - mild itching, self-limiting.	Clinical diagnosis; biopsy rarely performed.
Impetigo	- Honey-yellow crusted erosions often around mouth and nose in children, sometimes with bullae (bullous impetigo); - spreads by scratching.	Bacterial culture positive for <i>Staphylococcus aureus</i> or <i>Streptococcus pyogenes</i>.
Eczema herpeticum	- Clusters of uniform punched-out erosions on eczematous skin, often painful, associated with fever, lymphadenopathy; - may progress rapidly.	Tzanck smear showing multinucleated giant cells or HSV PCR positive.

Table 3: Differential Diagnosis of Vicharchika

Features	Vicharchika	Vipadika	Kitibha	Visarpa
Kandu/ Atikandu (Itching)	✓	✓ (Alpa Kandu)	-	
(Pidika) (Papular eruption)	✓	✓ (Saraga Pidika)	-	✓
Shyava (Balckish/greyish discolouration)	✓	-	✓	
Bahusrava (Excessive/ copious discharge)	✓	-	-	✓
Lasikadhya (Excessive watery discharge)	✓	-	-	-
Atiruja (Excessive pain)	✓	✓	-	✓
Raji (Manifestation of linear lesions)	✓	-	-	-
Chronicity	Often Chronic	Often Chronic	Often Chronic	Mostly acute
Site of manifestation	Anywhere in the body	Palms and soles	Anywhere in the body	Anywhere in the body

Features	Vicharchika	Vipadika	Kitibha	Visarpa
Dominance of Dosha	Vata Kapha	Vata Kapha	Vata Kapha	Tridosha with dominance of Pitta Rakta involvement
Special characteristics	-	-	Kinakhar sparsha (Rough in touch like scar tissue)	Rapid spreading lesion

Correlation of Atopic Dermatitis, Nummular Eczema, Dyshidrotic Eczema, and Contact Dermatitis with Vicharchika

In Ayurvedic classics, Vicharchika is a skin disorder characterized by *Kandu* or *Atikandu* (itching), *Pidika* (papular eruptions), *Shyava* (blackish or greyish discoloration), *Bahusrava* (excessive or copious discharge), *Lasikadhya* (excessive watery discharge), *Atiruja* (excessive pain), and *Raji* (manifestation of linear lesions).

1. सकण्डूः पिडका श्यावा बहुस्रावा विचर्चिका || २६ || Cha. Chi. 7/26
2. राज्योऽतिकण्ड्वर्तिरुजः सरूक्षा भवन्ति गात्रेषु विचर्चिकायाम् || १३ || Su.Ni. 5/13
3. सकण्डूपिटिका श्यावा लसीकाढ्या विचर्चिका || १८ || A.H.Ni.14/18

According to Acharya Charaka, Vicharchika is considered to have a predominance of Kapha Dosha. In general, skin disorders involve all three Doshas—Vata, Pitta, and Kapha. This is also true for Vicharchika, which has involvement of all three Doshas.

The general features outlined in classical Ayurvedic texts may not be present at every stage of the disease, as they depend on the involvement of the Doshas and the patient's condition. Thus, the symptoms of Vicharchika can be correlated with different types of dermatitis, depending on their clinical presentation. It is also important to note that not every clinical presentation will have a specific name, allowing physicians with the flexibility to differentiate and label the condition as needed. For example, in the case of atopic dermatitis or nummular dermatitis, the dry stage can be correlated with Vicharchika symptoms such as *Kandu* (itching), *Atikandu* (intense itching), *Pidaka* (papular eruptions), and *Shyava* (blackish or greyish discoloration). During this stage, oozing is typically absent. However, in the wet stage of the same disease, *Lasikadhya* (excessive watery discharge) may be present.

Dyshidrotic Eczema (DE) may be correlated with Vicharchika with the involvement of Pitta along with Vata and Kapha, as it commonly occurs in individuals with hyperhidrosis, and symptoms such as burning sensation and redness are observed in some cases. The symptoms of *Atikandu* (Severe itching), *Lasika* (fluid-filled vesicles), *Pidaka* are seen in DE patients. In cases of secondary infections, symptoms mentioned in the classics such as *Atiruja* (excessive pain), *Atisrava* (Pus discharge) may also be observed. Management for this condition should include *Pittahara* drugs in addition to the general treatment of Vicharchika if associated with burning sensation and hyperhidrosis. *Daha*, *Paka*, and *Putigandha* also indicates involvement of Pitta.

In contact dermatitis, symptoms are similar to Vicharchika like *Kandu*, *Daha*, *Ruja*, *Srava*, *Sphota* etc. In addition to the general line of treatment, *Garavisha Chikitsa* may also be incorporated

in the treatment of contact dermatitis in line with the management strategies explained in *Annapanaraksha Kalpam* of *Susruta Samhita*.

Table 4: SUPPORTIVE INVESTIGATIONS^{1,8,9,10,15,16,17}

Test	Comment
Essential	
Detailed history and Physical examination	
Complete haemogram (If systemic symptoms persist)	- Complete haemogram may show eosinophilia or other abnormalities of white blood cells. to exclude immune deficiencies, and IgE levels can be helpful to confirm an atopic pattern. - Immunoglobulin profile may be helpful to evaluate immunodeficiency or show raised IgE levels.
C-Reactive Protein	Inflammation is also characterized by an increased blood concentration of inflammatory markers, of which CRP is the most commonly used in clinical studies, being a strong marker of non-specific inflammation. C - reactive protein levels are influenced by many factors like age, BMI and smoking.
Skin scraping with KOH	This is a direct microscopic examination of the skin specimen to detect fungal spores or hyphae.
Skin swab test	To identify bacterial or viral infections that may superinfect the skin
Advanced	
Patch Test	- Patch tests are very useful in finding the cause of allergic but not irritant dermatitis, i.e., they detect allergens responsible for type IV allergy. - Depending on the degree of inflammation, the reaction is graded from 0 to 3+
Serum IgE Levels	- Total serum IgE levels and IgE antibodies specific to certain antigens (measured using radioallergosorbent test or RAST) may be useful in diagnosis in atopic states. - More than 80% of patients with AD have elevated IgE levels of >200 IU/mL. - RAST may sometimes help to identify specific (dietary and environmental) allergens which may be perpetuating dermatitis in an atopic patient. - May help in advising patients on role of dietary and environmental allergens in perpetuating dermatitis.
Skin Biopsy	Skin biopsy is an important and not commonly performed diagnostic procedure that may assist in making or confirming a diagnosis. The intent is to characterize the nature of skin growth or eruption and assist in the histopathologic evaluation of a tissue sample.
Doppler Ultrasound	- To differentiate dermatitis from other vascular or infectious conditions or to evaluate for cellulitis, venous insufficiency, or vasculitis, which may mimic or coexist with dermatitis - Doppler USG is useful to assess venous insufficiency, reflux, or deep vein thrombosis (DVT), which may underlie or worsen Stasis dermatitis.

Types of Dermatitis and Relevant Investigations

Type of Dermatitis	Investigations to be Done
Atopic Dermatitis (Eczema)	- Serum IgE levels - Complete Blood Count (For eosinophilia) - Specific IgE (if allergen suspected)
Contact Dermatitis (Irritant / Allergic)	- Patch testing (gold standard for allergic contact dermatitis) - History of exposure (occupational / cosmetic)
Seborrheic Dermatitis	- Usually clinical diagnosis - KOH mount to exclude tinea
Nummular Dermatitis	- Usually clinical - KOH mount to exclude tinea - Patch testing if chronic/recurrent
Stasis Dermatitis	- Venous Doppler ultrasound - CBC (if secondary infection suspected)
Neurodermatitis (Lichen Simplex Chronicus)	- Usually clinical - Skin biopsy if diagnosis is uncertain
Dyshidrotic Dermatitis (Pompholyx)	- KOH mount to rule out fungal infection - Patch testing (if recurrent or occupational exposure suspected)

DIAGNOSTIC CRITERIA^{1,2,7, 18,19,20}

The diagnosis of dermatitis is primarily clinical and made after a complete medical history and physical examination. Dermatitis has varied diagnostic criteria in different types of dermatitis which are stated below:

UK diagnostic criteria is specifically used for the diagnosis of Atopic Dermatitis

Table 5: Diagnostic Criteria for each type of Dermatitis

Type of Dermatitis	Diagnostic Criteria	
Atopic Dermatitis	Diagnostic criteria proposed by the United Kingdom Working Party: These consist of one mandatory and five major criteria, it is easy to use and do not require any laboratory testing.	
	Mandatory criterion (must be positive)	An itchy skin lesion or parental report of scratching or rubbing of skin
	Major criteria (at least three of the five should be positive)	Onset below 2 years of age (not used if the child is less than 4 years of old)
		History of skin crease involvement (including cheeks in children under 10 years)
		History of generally dry skin

Type of Dermatitis	Diagnostic Criteria	
		Personal history of other atopic disease (or history of any atopic disease in a first-degree relative of children under 4 years)
		Visible flexural dermatitis (or dermatitis of cheeks, forehead, or outer limbs in children below 4 years)
Irritant Contact Dermatitis	• Diagnosis by exclusion: history of repeated irritant exposure, lesions confined to contact area, immediate burning more than itching, improves on avoidance; • No positive patch test.	
Allergic Contact Dermatitis	• Requires positive patch test (type IV hypersensitivity); • Pruritic eczematous lesions often extending beyond contact site, delayed onset (24–72h after exposure).	
Seborrheic Dermatitis	• Clinical diagnosis: chronic erythematous patches with greasy yellow scales on seborrheic areas (scalp, eyebrows, nasolabial folds, chest); • Recurs with stress or winter.	
Nummular Dermatitis	• Circular or oval pruritic eczematous plaques on extremities, frequently oozing; • Diagnosis supported by negative KOH to rule out tinea.	
Dyshidrotic Dermatitis	• Characteristic presentation of recurrent deep-seated vesicles on sides of fingers, palms, soles, intensely pruritic, often triggered by stress or seasonal factors.	

An accurate diagnosis is crucial in a disease condition to provide the optimum treatment. In each case of *Vicharchika*, the *Dosha* condition has to be analysed along with identification of the exact cause. Appropriate medicines are to be selected based on the cause and the involvement of doshas. External applications are generally indicated if the *Dosha* is situated in the *Twak*.

The acute stage is generally considered as a '*Vata Paittika*' predominant condition, while the sub-acute stage is '*Pitta Kaphaja*', and the chronic stage is '*Vata Kaphaja*'. The chronic stage may be considered as *Kitibha* rather than *Vicharchika*.

Evaluation and Assessment^{21,22,23}

The most used tools for assessing dermatitis severity in adult patients are presented and compared.

It's an inflammatory condition requires accurate severity assessment for effective management. Various assessment tools used for the evaluation of dermatitis are as follows:

Table 6: Assessment tools for Dermatitis

Tool	Comments
Scoring Atopic Dermatitis (SCORAD)	Assesses disease extent, severity of 6 clinical signs on a 4-point scale, and patient-reported pruritus and sleep loss, to a maximum score of 103
Atopic Dermatitis Severity Index (ADSI)	The sum of 5 items rated on a 4-point scale (0-3): erythema, excoriation, exudation, lichenification, and pruritus
Six Sign Atopic Dermatitis (SASSAD)	Six clinical signs are scored from 0 to 3 at each of 6 sites on the body
Dermatology Life Quality Index (DLQI)	10-item questionnaire assessing impact on daily activities and overall quality of life
Eczema area and severity index	The EASI is a widely used tool to assess the severity of atopic dermatitis (eczema). It evaluates two main components: • Area: The percentage of body surface area affected by eczema. • Severity: The intensity of eczema symptoms

PRINCIPLES OF MANAGEMENT

The principles of management include assessment of signs and symptoms before initiating treatment and the need for management through conventional treatment for associated comorbidities. If the patient is already under standard care, the physician may advise to continue the same along with add-on Ayurvedic treatment and can be assessed for the same in the follow ups for tapering or discontinue the treatment in consultation with the conventional physician.

In Ayurveda, *Kustha* is an umbrella term for various skin diseases. It results from improper diet and lifestyle that significantly affect physiological and psychological well-being. The causative factors hint the involvement of *Ama visha*, *Krimi*, *Rakta* and *Manas* in addition to the *Tridoshas*. All the skin diseases are said to be *Tridoshaja* and is generally considered as chronic. The permutations and combinations of *Nidana* decide the *Dhatu*s and *Dosh*as involved, leading to specific skin diseases.

Management may include *Nidana Parivarjana* (avoidance of disease-causing factors), *Samprapti Vighatana* (the process of disrupting the pathogenesis (*Samprapti*) of a disease to facilitate its treatment and to facilitate non-recurrence) and relevant principles of *Krimi*, *Visha*, *Visarpa* and *Jwara Chikitsa*. The clinician should be able to diagnose the doshas and dooshyas involved and the level of involvement to decide the selection of drugs and duration of treatment.

1. *Samprapti Ghatkas*

- *Dosh*as : *Tridosha*
- *Dushya* : *Twak*, *Rakta*, *Mamsa*, *Lasika*(*Ambu*)
- *Srotas* : *Rasa*, *Rakta*, *Mamsa* & *Udakavaha Srotas*

- *Agni : Jatharagnimandya & Dhatwagnimandya*
- *Srotodusti : Sanga & Vimargagamana*
- *Sanchara : Tiryaga sira*
- *Adhishtana : Twaka*
- *Rogamarga : Bahya**
- *Swabhava : Chirakari*

Note*- *Kustha* has a *Sarva Dehagata* nature. If treatment is delayed and is inadequate, it affects the deeper *Dhatus*. The *Samprapti* of *Kustha* is a complicated one. The aggravated *Tridoshas* move through the side-ward channels (*Tiryakagata Sira*- and are thrown towards the outwards from the *Koshtha* by *Vata*. So, the origin of the disease may be from *Koshtha*, but it is considered primarily as a disease of the *Bahya Rogamarga*.

Red Flag Signs

These signs should be assessed before initiating treatment for need for management/consultation through modern medicine.

- Secondary bacterial or viral infection (pus, fever)
- Generalized erythroderma
- Growth delay in children with Atopic Dermatitis
- Severe psychological distress

(A) Preventive Treatment

The effective management of Dermatitis (*Vicharchika*) focuses on both preventive and curative measures, emphasizing diet, lifestyle and psychological well-being. Preventive measures involve *Nidana Parivarjana*, which refers to the avoidance of causative factors of the disease.

Diet

It is recommended that one's *Satmya Ahara* (habitually suitable and agreeable food) be taken warm and fresh, avoiding preparations that are excessively dry or heavy. The food should be consumed mindfully, with proper chewing and at a steady, moderate pace. The intake of *Viruddhahara* (incompatible foods) may contribute to the onset of skin diseases; therefore, such foods should be avoided.

Life style

Following *Dinacharya* (daily regimen) and *Ritucharya* (seasonal regimen) as prescribed in classical Ayurvedic texts helps in maintaining overall health and preventing diseases

Yoga²⁴

Dermatitis is a multifactorial condition influenced by immune dysregulation and psychosocial stress, where stress aggravates inflammation, elevates pro-inflammatory cytokines (e.g., IL-6, TNF- α), and delays skin healing. From a yogic standpoint, it reflects an imbalance at both physiological and psychological levels. Yoga offers a holistic, evidence-based approach by reducing stress and modulating neuroendocrine function through practices like Dhyana and Yoga Nidra, which help lower cortisol levels. Pranayama techniques such as Nadi Shodhana and Bhramari improve autonomic balance and reduce systemic inflammation. Additionally,

Asanas like Tadasana, Trikonasana, Padahastana, Ardachakrasana, Bhujangasana, Setu Bandhasana enhance circulation and support skin repair. Collectively, yoga exerts anti-inflammatory and immunomodulatory effects, while improving psychological well-being and quality of life. (Proper guidance from a yoga expert is essential before practicing yoga for skin disorders)

(B) Curative Treatment

Treatment can be initiated from the *Poorvaroopa* Stage itself. Preferably combinations/ formulations containing *Kusthahara* property may be selected.

Stages of treatment:

- **Elimination of Ama and kleda** (process of digesting and eliminating toxins (Ama) from the body) by *Pachana*, *Anulomana* or *Sramsana*; *Patolamooladi Kashaya*²⁵ and *Phalatrikadi Kashaya*²⁶ etc may be used for *Sramsana*/*Anulomana*.and *Chitrakadi gutika*²⁶ may be used for *Pachana*.
- **Agnideepana** (concept of stimulating and strengthening the digestive fire ie, *Agni*)
Examples: *Agnitundi Vati*²⁷ *Ajamodadi churna*²⁸, *Shaddharana Churna*²⁹ etc.
- **Strotovishodhana** (process of cleansing and purifying the body channels (*Srotas*) to remove blockages and promote proper circulation) such as *Trivruta Churna*³⁰
- **Vyadhiviparita Chikitsa**
Such as *Manjisthadi Kashaya*³¹, *Mahamanjisthadi Kashaya*, *Panchatikta Guggulu Ghrita*³², *Khadirarishta*, *Sarivadyasava*³³ etc.
- **Rasayana** (Rejuvenation and promoting longevity through specific treatments and lifestyle practices)
Such as *Mahatiktha Ghrita*³⁴, *Madhusnuhi rasayanam*³⁵, *Bhallataka Rasayanam*³⁶, *Gandhaka rasayanam*³⁷, *Khadirarishta* etc.
- **Krimi, Visha, Visarpa and Jwara Chikitsa** as per the condition.
Formulations such as *Nirgundyadi Kashaya*³⁸, *Vidanga Churna*, *Vilwadi Gulika*,³⁹ *Dushivishari agada*⁴⁰, *Dasanga lepa*⁴³, *Visha Taila*⁴¹ etc can be used.
- **Nidana Parivarjana and Pathya Sevana**
Pathya needs to be followed during and after the treatment.

The line of treatment of *Vicharchika* has been classified into

- Shodhana chikitsa*
- Shamana chikitsa*

(A) Shodhana Chikitsa – Purificatory Therapy:

- *Vata Pradhana* – *Sarpipan/ Ghritapana*
- *Pitta Pradhana* – *Raktamokshana/ Virechan karma*
- *Kapha Pradhana* – *Vamana*

In *Kustha chikitsa*, purificatory procedures along with their frequency interval are described as below⁴²

1. *Nasya* - every 3 days
2. *Vamana* - every 15 days
3. *Virechana* - every 1 month
4. *Raktamokshana* - every 6 months

These may be performed as per the clinical condition of the patient and by assessing the feasibility.

(B) Shamana Chikitsa - Curative Intervention:

- *Shamana Chikitsa* is intended to subside dermatitis in those patients who are unable to do *Shodhana Chikitsa* and/or are contraindicated for *Shodhana karma*.
- *Shamana chikitsa* is also done to subside the remnant *Doshas* after *Shodhana Karma*

External medicinal application/Bahi parimarjana: This can include application of *Lepa*, *Parisheka*, *Avachurnana* etc. External application of medicinal preparation in the form of paste/oil/ghee/decoction etc on skin lesion after performing *Shodhana* or *Shamana* therapies provides early relief.

Management of Atopic Dermatitis, Contact Dermatitis, Nummular Dermatitis and Dyshidrotic dermatitis through Ayurveda:

Patients may present in the acute, sub-acute, or chronic stage of the disease. The duration of treatment for each stage may be individualized based on the clinical presentation and the extent of *Dosha*, *Dhatu*, and *Agni Dushti*.

Atopic Dermatitis:

Atopic dermatitis (AD) is a common inflammatory skin condition occurring in both pediatric and adult patients. Pruritus is a clinical hallmark of the disease, and patients with AD often experience disruptions to their quality of life. Clinically, AD is characterized by pruritus, eczematous skin changes, and age-specific lesion distribution patterns. Infants and young children tend to have AD lesions on their face and extensor surfaces of their extremities while older children and adults tend to have AD lesions on flexural surfaces of their extremities. Many patients also experience a chronic and relapsing disease course. Due to the chronicity and severe pruritus, lesions often undergo secondary changes like lichenification. Patients with AD can experience a number of comorbidities including other atopic disease (i.e. allergic rhinitis, asthma), skin infections, cardiovascular, and neuropsychiatric illnesses.

Initial stage: (14 to 30 days)

- *Ama pachana* and *Sramsana* – *Patolamooladi Kashaya*
- Along with *Agnideepana*, *Prana Anulomana* to be considered in the initial stage of treatment if associated with Respiratory symptom eg: *Sitopaladi churna*⁴³, *Amrutotharam Kashaya*⁴⁴, water boiled with dried ginger/*Jeera/ajwain* for drinking purposes etc
- *Kledahara*: *Punarnavadi Kashaya*⁴⁵ *Gokshuradi guggulu*³², *Punarnavasava*³² (Especially in cases of weeping eczema)

- *Dushivishari Agada* can be given.

Second Stage: (1 to 2 months)

- *Agni deepana – Hinguvashtak churna, Agnitundi Vati*
- *Rasa Rakta Dhatu Prasadana, Srotoshodhana – Avipattikara churna, Mahamanjishtadi Kashaya*
- *Bahiparimarjanam – After Ama Pachana, Kashaya Dhara* may be planned with *Punarnavadi Kashaya, Guluchyadi Kashaya, Manjishtadi Kashaya* etc for 15 – 30 minutes, followed by application of coconut oil.
- In cases of sleep disturbances due to itching, after the initial stage, procedures like *Sirolepa and Takradhara*⁴⁶ may be planned, considering the season and the condition of the patient.

Third Stage: (2 to 3 months)

- *Manibhadra Gulam*
- *Madhusnuhi Rasayana*⁴⁷
- *Nalpamaradi taila, Eladi Kera*⁴⁸– External Application

Nummular Dermatitis:

Nummular eczema is characterized by sharply defined, oval or coin-shaped, erythematous, eczematous plaques. Typically, the size of the lesion varies from 1 to 10cm in diameter. The lesions are usually multiple and symmetrically distributed. Sites of predilection include the lower limbs followed by the upper limbs. The lesions are usually intensely pruritic. The diagnosis is mainly clinical based on the characteristic round to oval erythematous plaques in a patient with diffusely dry skin. Nummular eczema should be distinguished from other annular lesions.

Initial stage: (14 to 30 days)

- *Ama pachana and Sramsana – Patolamooladi Kashaya, Phalatrikadi Kashaya, Avipattikara Choornam*
- *Kledahara: Punarnavadi Kashaya, Gokshuradi guggulu, Punarnavasava, Punarnavadi guggulu*
- *Agnideepana– Ajamodadi churna, Water boiled with dried ginger/jeera/ajamoda* for drinking purposes

Second Stage: (1 to 2 months)

- *Rasa Rakta dhatu prasadana, Srotoshodhana – Avipattikara churna, Mahamanjishtadi Kashaya, Patolakaturohinyadi Kashaya.*
- *Bahiparimarjanam – After Ama Pachana, Kashaya dhara* may be planned with *Guluchyadi Kashaya, Manjishtadi Kashaya*, etc, for 15 – 30 minutes, followed by application of coconut oil.
- *Sirolepa, Takradhara* may be planned in this stage (7 to 14 days)
- *Raktamokshanam - Prachana, Jalukavacharana*

Third Stage: (2 to 3 months)

- *Manibhadra Gulam*
- *Madhusnuhi Rasayana*
- *Mahatikthaka Ghrita*
- *Gandhaka Rasayana*
- *Nalpamaradi taila, Eladi Kera, Dineseladi Kera* etc– External Application

Dyshidrotic Eczema:

Dyshidrotic eczema (DE) or acute palmoplantar eczema is a common cause of hand dermatitis in adults. It is a vesiculobullous disorder of the hands and soles. It is an intraepidermal spongiosis of the thick epidermis in which accumulation of edema causes the formation of small, tense, clear, fluid-filled vesicles on the lateral aspects of the fingers that can become large and form bullae.

- **Initial Stage:**

*Ama pachana and Sramsana/ Anulomana -Patolamooladi Kashaya, Avipattikar Churna, Drakshadi Kashaya*⁴⁹

- **Second Stage:**

Thalapothichil/Takradhara – for 7 to 14 days
Vatapittahara medicines

- **Third Stage:**

*Manibhadra Gudam*⁵⁰, *Mahatiktakam Ghrita, Khadirarishta*.

Contact Eczema:

Contact dermatitis (CD) is an inflammatory skin condition triggered by chemicals or metal ions that cause irritant effects, or by contact allergens that modify proteins and induce immune responses, primarily through T cells. CD can manifest as irritant contact dermatitis or allergic contact dermatitis, both of which can be acute or chronic.

Irritant contact dermatitis results from direct chemical damage and does not involve immune reactions or prior sensitization, leading to similar responses among most individuals exposed to irritants.

In contrast, allergic contact dermatitis is a delayed hypersensitivity reaction (type IV) that requires prior exposure to allergens. Skin lesions from CD can occur due to various irritants or allergens, UV radiation, microbial exposure, or intrinsic factors. When related to work environments, it may be classified as occupational contact dermatitis, often due to substances like alcohol-based disinfectants, detergents, or latex gloves. Parthenium dermatitis is a form of allergic contact dermatitis (ACD) caused by airborne particles (especially sesquiterpene lactones) from the weed *Parthenium hysterophorus*, leading to itchy rashes (papules/plaques) on exposed skin (face, neck, chest, limbs).

Allergic Contact Dermatitis-

First Stage (7 to 14 Days)

- *Nidana Parivarjana*- Avoid Allergens /triggers

- Application of Coconut Oil over the lesions
- Internally, *Patolamooladi Kashaya*, *Avipattikar Churnam*, *Dushivishari Gulika*, *Amapachana Vati*

Second Stage: (15 to 30 Days)

- *Agni deepana* – *Chiktrakadi Vati*, *Agnitundi Vati*, *Amruttotara Kashaya*, *Amapachana Vati*.
- *Rasa Rakta dhatu prasdana*, *Srotoshodhana* – *Avipattikara churna*, *Mahamanjishtadi Kashaya*
- *Bahiparimarjanam* – After *Ama Pachana*, *Kashaya dhara* may be planned with *Punarnavadi Kashaya*, *Guduchyadi Kashaya*, *Manjishtadi Kashaya* etc for 15 – 30 minutes, followed by application of coconut oil.
- If the lesion is dry and inflammation is subsided then *Nalpamaradi taila*, *eladi taila* can be used.

Third Stage: (up to 1 month)

- *Manibhadra Gulam*
- *Madhusnuhi Rasayana*
- *Indukanta Ghrita*⁵¹ *Chyavanaprash*
- *Nalpamaradi taila*, *Eladi Kera* for External Application can be used.

Irritant Contact Dermatitis-

First Stage (0 to 7 Days)

- *Nidana Parivarjana*- Avoid the irritant
- Cleaning the lesion and Application of *Aloevera*
- Internal medications:

Avipattikar Churnam, *Dushivishari Gulika*, *Punarnavadi Kashaya*, *Haridrakhanda*

Second Stage: (Up to 14 Days)

- Internal – *Guduchyadi Kashaya*, *Avipattikara churna*
- *Bahiparimarjanam* –Application of coconut oil, *Nimba Taila* if the lesion is dry.

Level 1: Solo Physician Clinic/Health & Health Clinic/PHC (Optimal Standard of treatment in situation where technology and resources are limited.

Clinical Diagnosis

The diagnosis of Dermatitis (*Vicharchika*) is primarily clinical and made after complete medical history and physical examination, however, following investigations may be done to assess severity of inflammation or to exclude other diagnosis:

- Complete Hemogram
- Skin scraping with KOH

Assessment of severity by different assessment tools such as SCORAD, ADSISASSAD, DLQI

Management⁵²

At level 1, treatment is solely based on Shamana protocol based on dosha predominance of clinical manifestation.

Table 7: Medicines used in the treatment of Dermatitis

Name of Drug	Dosage form	Dose	Time	Duration	Adjuvants
<i>Aragvadhariṣṭha</i> (<i>Ashtangahridayam</i>)	Arishta	12-24 ml	twice daily	Till <i>dosha</i> and <i>rogasamana</i>	Water
<i>Khadirariṣṭha</i> (<i>Baishajyaratnavali</i>)		12-24 ml	twice daily	Till <i>dosha</i> and <i>rogasamana</i>	Water
<i>Haridrakhanda Paka</i> (<i>Baishajyaratnavali</i>)	Khanda	6 g	twice daily	Till <i>dosha</i> and <i>rogasamana</i>	Water or milk
<i>Manibhadra Yoga/</i> <i>Manibhadra Guda</i> (<i>Ashtangahridayam</i>)	Leha	6-12 g	twice daily	Till <i>dosha</i> and <i>rogasamana</i>	Water or milk
<i>Madhusnuhi Rasayana/</i> <i>Madhusnuhyadi</i> <i>Rasayana</i> (<i>Sahasrayoga</i>)		6-12 g	twice daily	Till <i>dosha</i> and <i>rogasamana</i>	Water or milk
<i>Aragwadhadi Kwath</i> <i>Churna</i> (<i>Ashtangahridayam</i>)	Kwatha	25-50 ml	once or twice a day	Till <i>dosha</i> and <i>rogasamana</i>	-
<i>Manjisthadi Kashaya</i> <i>Churna</i> (<i>Sahasrayogam</i>)		25-50 ml	once or twice a day	Till <i>dosha</i> and <i>rogasamana</i>	-
<i>Patolakaturohinyadi</i> <i>Kwatha Churna</i> (<i>Ashtangahridayam</i>)		25-50 ml	once or twice a day	Till <i>dosha</i> and <i>rogasamana</i>	-
<i>Kaishora Guggulu</i> (<i>Sarngdhra Samhita</i>)	Gutika	Upto 3 g in divided doses	once or twice a day	Till <i>dosha</i> and <i>rogasamana</i>	With warm water or <i>mudgayoosha</i> or milk
<i>Arogyavardhini Vati/ Rasa</i> (<i>Rasendrasarasangrah</i>)		250-500 mg	twice a day	Till <i>dosha</i> and <i>rogasamana</i>	With honey or warm water or <i>adrak swaras</i> after meals
<i>Gandhaka Rasayana</i> (<i>Yogaratanakaram</i>)		250-500 mg	twice a day	Till <i>dosha</i> and <i>rogasamana</i>	With milk or water
<i>Panchatikta Ghrita</i> (<i>Baishajyaratnavali</i>)	Ghritha	5-10 g	Once a day	Till <i>dosha</i> and <i>rogasamana</i>	With warm milk or water

Name of Drug	Dosage form	Dose	Time	Duration	Adjuvants
<i>Tiktaka Ghrita</i> (<i>Ashtangahridayam</i>)		5-10 g	Once or twice a day	Till <i>dosha</i> and <i>rogasamana</i>	With warm milk or water
<i>Kalyanaka Ghrita</i> (<i>Ashtangahridayam</i>)		5-10 g	Once or twice a day	Till <i>dosha</i> and <i>rogasamana</i>	With warm milk or water
<i>Panchanimba Churna</i> (<i>Baishajyaratnavali</i>)		3-6 g	Twice a day	Till <i>dosha</i> and <i>rogasamana</i>	<i>Madhu</i> , <i>Khadira</i> and <i>Asana Kwatha</i> or warm water
<i>Marichadi Taila</i> (<i>Sarngdhara Samhita</i>)	Taila External application on affected body part	Q.S	SOS	Till <i>dosha</i> and <i>rogasamana</i>	-
<i>Nalpamaradi Taila</i> (<i>Sahasrayogam</i>)		Q.S	SOS	Till <i>dosha</i> and <i>rogasamana</i>	-
<i>Somaraji Taila</i> (<i>Bhaishajyaratnavali</i>)		Q.S	SOS	Till <i>dosha</i> and <i>rogasamana</i>	-
<i>Dashanga Lepa</i> (<i>Baishajyaratnavali</i>)	Lepa	Q.S	SOS	Till <i>dosha</i> and <i>rogasamana</i>	Mix the <i>Lepa Churna</i> with ghee or butter and apply on affected area
<i>Gandhakadya Malahar</i> ⁵³ (<i>Rasatarangini</i>)		Thin coat on the affected part	Twice a day	Till <i>dosha</i> and <i>rogasamana</i>	

Note: Out of the drugs mentioned above, any one of the drugs or in combination may be prescribed by the physician. The duration of the treatment may vary from patient to patient. Physician should decide the dosage (per dose) and duration of the therapy based on the clinical findings and response to therapy.

Preferable Diet- Lifestyle & Restricted Diet- Lifestyle

Table 8: Pathya-Apathya (Do's & Don'ts) for Kustha* (Skin Disorders) ^{54,55}

Pathya/ Do's	Apathya / Don'ts
1. <i>Laghu anna</i> (Light food) 2. <i>Tikta shaka</i> (green leafy vegetables) 3. <i>Ghrita</i> (Ghee) 4. <i>Mudga</i> (Green gram) 5. <i>Aadaki</i> (Pigeon pea) 6. <i>Yava</i> (barley) 7. <i>Godhooma</i> (wheat) 8. <i>Madhu</i> (Honey)	1. <i>Dugdha</i> (milk), 2. <i>Dadhi</i> (curd), 3. <i>Kulatha</i> (horse gram), 4. <i>Masha</i> (black gram), 5. <i>Nishpava</i> (green peas), 6. <i>Ikshu</i> (sugarcane), 7. <i>Amla Rasa</i> (sour fruits), 8. <i>Virudha Ahara</i> (incompatible food),

Pathya/ Do's	Apathya / Don'ts
9. Sali (Rice) 10. Karkati (Cucumber) 11. Triphala (mixture of three dried fruits, namely Haritaki (<i>Terminalia chebula</i>), Bibhitaki (<i>Terminalia bellirica</i> or Baheda) and Amalaki (<i>Emblca officinalis</i> or Amla) 12. Patola (Snake gourd) 13. Kakamachi (Black night shade) 14. Nimbapatra (Neem leaves) 15. Lasuna (garlic) 16. Punarnava (spreading hogweed) 17. Khadira (Black catechu) 18. Tila Taila (gingelly oil) 19. Sarshapa taila (Mustard oil)	9. Adhyasana (overeating), 10. Ajeerna (indigestion), 11. Vishamasana (untimely food) 12. Vidahi burning sensation), Vishtambhi and Abhishyandi ahara 13. Matsya (fish) 14. Guda (jaggery) 15. Tila (sesame) 16. Drava, snigdha, guru Ahara (liquid, unctuous and heavy to digest food)
Vihara- Apathya	
1. Vegavaraodha (Suppression of natural urges) 2. Atapaseva (Over exposure to Sun) 3. Drinking cold water after direct exposure to the sun and after exertion. 4. Consuming food before the complete digestion of the previous meal. 5. Day sleep 6. Stress 7. Doing exercise or over exertion immediately after heavy meals 8. Over exertion after Snehapana & Vamana 9. Sudden change from cold to heat or heat to cold without following the rules of gradual change 10. Sudden change from Santarpana to Apatarpana & Vice-versa 11. Improper administration of Snehapana and Panchakarma Procedures	

General Instructions

- Keep skin dry and clean, especially in areas like skin folds, armpits, and groin areas.

Hand Hygiene:

- Washing hands frequently with soap and water, especially after touching potentially contaminated surfaces or individuals.
- Don't share towels, clothing, razors, and personal care items.

Foot Hygiene:

- Wear breathable shoes and moisture-wicking socks, especially in warm or humid weather.
- Dry feet thoroughly, particularly between the toes, after showering or swimming.
- Avoid Walking Barefoot in Public Areas:

Clothing Choices:

- Opt for loose-fitting, breathable clothing made of natural fibers like cotton, which can help prevent moisture buildup.
- Allow shoes to dry out completely between uses to prevent fungal growth.

Nail Hygiene:

- Keep nails short and clean, and avoid biting or scratching the skin, especially if you have an existing fungal infection.

Hygiene in Communal Areas:

- Wash exercise clothes after each use.

**These are general pathya-apathya guidelines to be followed in skin diseases. However, they may be tailored on a case-to-case basis, taking into account the patient's prakriti, type of Kustha, seasonal variations, and other relevant factors.*

Follow Up: Clinical examination needs to be done during every visit- atleast once in every 15 days or earlier as per need. Strict adherence to dietary restrictions (*Pathya apathya*) for a duration equal to or twice the total period of treatment should be advised. *Naimittika rasayanas* should also be administered during follow-up visits. Screening for complications or any other secondary infections evidenced by *Atiruja*, *Atilasikasrava* etc.

Referral Criteria

- Lack of clinical improvement after 4-6 weeks of individualized treatment
- Extensive skin involvement (>30% BSA), especially in children or elderly.
- Severe pruritus leading to sleep disturbance or psychological distress.
- Severe pain with burning or stinging sensation.
- Secondary infection suspected due to oozing, crusting, fever, or lymphadenopathy.
- Diagnostic uncertainty (e.g., differential diagnosis from psoriasis, seborrheic dermatitis, scabies).
- Evidence of an increase in severity/complications.
- Coexisting systemic diseases (diabetes, hypothyroidism, renal impairment) affecting skin healing.
- Recurrent relapses despite compliance with therapy.
- Suspected allergic etiology needing patch testing or further evaluation.
- Substantial impact on their quality of life and activities of daily living

Level 2: (CHC/Small hospitals (10-20 bedded hospitals with basic facilities such as routine, investigation, X-ray)

Clinical Diagnosis

Same as level 1. The case referred from Level 1, or a fresh case must be evaluated thoroughly for any complications. Investigations such as Serum IgE may be necessary to exclude other differential diagnoses or to investigate complications.

Management

Based on the *Dosha* predominance, suitable medicines may be selected as given in Table 7.

Purification/ other procedures (As per applicability)

A general line of *Shodhana* treatment along with external therapeutic procedures is given below which can be modified according to the *Dosha* involvement and the conditions of the particular patient. Feasibility of doing the procedure at level 2 also needs to be considered.

- **Deepana and pachana**- with *Shaddharanam churna* or *Hingwashtaka churna*⁵⁶ or *Vaishwanara churna*⁵⁷ or *Ajamojadi churna* or *Bhaskara lavana churna* for a duration of 3 days or until the appetite is good.
- **Snehapana**- with *Panchatiktaka ghrita* or *Aragwadha mahatiktaka ghrita* or *Tiktaka ghrita* or *Mahatiktaka ghrita* - starting from 30 ml till *Samyaka snigdha lakshana* is observed (for a maximum period of 7 days).
- **Abhyanga and Swedana**- *Eladi kera* or *Nalpamaradi taila*⁵⁸ or *Nimbadi taila* or any suitable oil as per *Dosha* involvement indicated for *Kustha* or *Twak roga* followed by *Ushnambu snana* for 1 day.
- **Vamana**- *Vamana karma* may be done with *Madanapippali*, *Nimba*, *Vacha*, *Saindhava* and *Madhu* (or) *Vacha Yashtimadhu Madanapippali* in *Nimba swarasa* with honey (or) Any other *Vamana yoga* specifically indicated for skin disease. Duration: One day.
- *Samsarjana krama*- *Peyadi Krama* should be suggested as per *Avara*, *Madhyama* or *Pravara shuddhi* for 3/5/7 days respectively
- **Virechana**- with *Nimbamritadi Eranda taila*, *Avipattikara churna*, *Trivruta leha*, *Triphala kwatha*⁵⁹ as appropriate taking *doshavastha* into consideration .Other internal medicines are stopped during *Virechana* and restarted during or after *Samsarjana Krama*.
- *Samsarjana krama* after *Virechana* as per *Avara*, *Madhyama* or *Pravara shuddhi* for 3/5/7 days.
- **Sarvanga Kashaya dhara.** Can be done with *Aragwadhadhi kashaya* or *Manjishtadi kashaya* or *Panchatiktaka kashaya* or any other *Twakdoshahara* and *Raktaprasadana kashaya*.
- **Takradhara** - with *Musta Amalaki takra* or *Aragwadhadhi takra* or *Manjishtadi takra* or *Panchatiktaka takra* for 7 /14/21days depending on the *Dosha* status. When *Shirolepam* is done, *Amalaki* and buttermilk prepared in *Kashayasiddha Ksheera* are used. *Rasnadi choorna/Kachuradi churna* with *Dhanvantaram taila/ Bala taila / Nimbamritadi taila* can be used for *tailam*
- **Marsha nasya**- with *Ksheerabala taila* or *Shadbindu taila*. *Takradhara*, *Shirolepa* and *Nasya* help in alleviating anxiety and stress which is usually a comorbidity in all psoriatic patients.
- **Prachhana/ Raktamokshana/ Siravedha:** As per locations of lesions, *Raktamoksha* is done on *Lalata*, *Hastapada* or *Shiras*. *Prachana* is done in *Alpadosha* status. In *Bahudosha*, *Siravedha* is advised. In children *Jalooka* can be applied.

All internal medicines are continued till *Dosha* and *Roga Shamana*. *Upashaya Anupashaya* may be considered.

Rasayana drugs are started after *Dosha* and *Roga Shamana* and continued for a period of one to 6 months.

Swastha vritta is to be followed during treatment and continued after complete *Roga Shamana*.

Preferable Diet & Lifestyle: As mentioned in Table 8.

Restricted Diet & Lifestyle: As mentioned in Table 8

Follow Up: After every 15 days or earlier, as per the need. Strict adherence to dietary restrictions (*Pathya apathya*) for a duration equal to or twice the total period of treatment should be advised. *Naimittika Rasayanas* should also be administered during follow-up visits.

Referral Criteria

- Same as mentioned earlier at level 1
- Non-response to treatment after 4–6 weeks of individualized therapy.
- Complicated or severe forms (e.g., eczema herpeticum, generalized erythroderma)
- Requirement for skin biopsy or histopathological confirmation.
- Presence of psychological disturbance (e.g., anxiety, depression due to disfigurement)
- Immunocompromised states (e.g., HIV, chemotherapy) complicating presentation.
- Referral if lesions are widespread, unresponsive, or infected.
- Autoimmune disorders with cutaneous overlap (e.g., SLE, celiac disease).
- Need for multi-disciplinary care (e.g., dermatology, allergology, psychiatry).
- Any other complication considered life-threatening by the investigator/clinician.

Level 3: (Ayush hospitals attached with teaching Institutions, District Level/ Integrated/ State Ayush Hospitals)

Clinical Diagnosis

Along with the newly diagnosed cases, the cases diagnosed at levels 1 and 2 that have multi-spectrum complications are addressed at the tertiary level. In level 3, the clinical diagnosis of *Vicharchika* is made according to Ayurveda, focusing on the *Doshas* involved in the pathology of the clinical manifestation. Although Ayurveda categorizes *Vicharchika* under the broad term “*Kustha Roga*,” it recognizes different varieties based on specific clinical presentations.

Clinical Diagnosis will be the same as in level 1 and 2.

Confirmation of diagnosis and assessment of severity can be done with the help of investigations such as

- Patch test (for allergic contact dermatitis)
- Detailed evaluation: Skin biopsy
- Peripheral blood eosinophil count.

The treatment strategy planning at level 3 includes purificatory therapies for *Bahudosh* *Kustha*, and subsequent *Rasayana* medicines for strengthening the purified *Dhatu*. In the case of *Madhyama Dosh* or *Alpa Dosh* *Kustha*, *Samanoushadhi* will be utilized as per *Dosh* dominance and *Dhatu* involvement.

Management

Internal and External Medications as per table no: 7

Purification/ other procedures (as per applicability)

Shodhana treatment along with external therapeutic procedures according to the *Dosh* involvement and the conditions of the patient should be done at level 3. Subsequent *Rasayana*

therapies should also be done after *Shodhana* therapy. In the case of *Madhyama Dosha* or *Alpa Dosha Kustha*, *Samanoushadhi* will be utilized as per *Dosha* dominance and *Dhathu* involvement.

- The general line of *shodhana* treatment for *Vicharchika* is mentioned in Level 2.
- All internal medicines are continued till *Dosha* and *Roga Shamana*. *Upashaya Anupashaya* may also be taken into consideration
- After *Dosha /Roga Shamana*, *Rasayana oushadis* should be started and continued for a period of one to 6 months.

Preferable Diet & Lifestyle: As mentioned in table No: 8

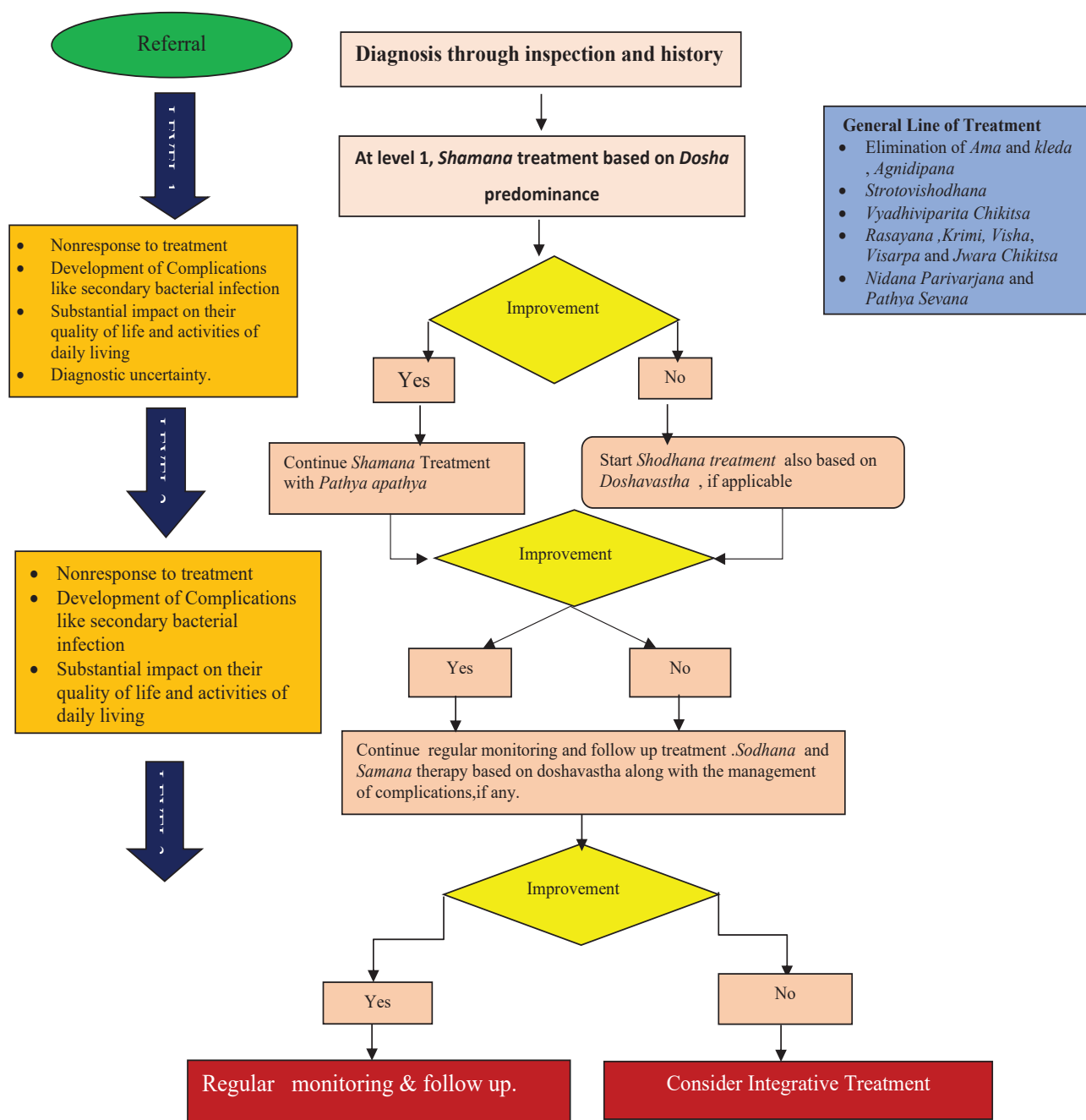
Restricted Diet & Lifestyle: As mentioned in table No: 8

Follow Up After every 15 days or earlier, as per need. Strict adherence to dietary restrictions (*Pathya apanya*) for a duration equal to or twice the total period of treatment should be advised. *Naimittika rasayanas* should also be administered during follow-up visits.

Referral Criteria

- Same as mentioned earlier at level 2, plus
- Life-threatening complications, e.g., sepsis from superimposed infection.
- Treatment-refractory cases unresponsive to Ayurveda and supportive therapy.
- Severe psychological morbidity which needs inpatient psychiatric care.
- Integrated approach for cases with psychiatric distress or systemic complications.
- Uncontrolled immunosuppressive complications such as infections like *Staphylococcus aureus*, eczema herpeticum (HSV), and molluscum, ocular complications such as cataracts and keratoconus, telangiectasia, and acneiform eruptions, hypertension and nephrotoxicity etc.
- Suspicion of malignancy or precancerous skin changes (e.g., cutaneous T-cell lymphoma)
- Requirement of immunosuppressants or systemic antibiotics.
- Other modalities can be considered depending on the case.

ALGORITHM OF TREATMENT PROCESS FOR DERMATITIS



REFERENCES

1. Bieber T. Atopic dermatitis. *N Engl J Med*. 2008;358(14):1483–1494.
2. Weidinger S, Novak N. Atopic dermatitis. *Lancet*. 2016;387(10023):1109–1122.
3. Shastri P K, Ashtang Hridaya of Vaghbata Vidvanmanoranjini Hindi commentary , First edition, Varanasi, Krishnad Academy Varanasi, 1994; Nidana Sthan 14/18, p.147.
4. Shastri P K & Chaturvedi G N, Charaka Samhita of Agnivesha Vidyotini Hindi commentary, Part 2, Reprint Edition, Varanasi, Chaukhambha Bharti Academy, 2017; Chikitsa sthan 7/26, p.253.
5. Hay RJ, Johns NE, Williams HC, et al. The global burden of skin disease. *J Invest Dermatol*. 2014;134(6):1527–1534.
6. James WD, Berger TG, Elston DM. *Andrews' Diseases of the Skin: Clinical Dermatology*. 13th ed. Saunders; 2013.
7. Degreef H. Clinical forms of dermatophytosis. *Mycopathologia*. 2008;166(5-6):257–265
8. Nayak C, et al. Clinical evaluation of homoeopathy in dermatitis. *Homoeopathy*. 2021;110(2):97–105.
9. Dhar S, Malakar R. Consensus statement on management of atopic dermatitis. *Indian J Dermatol*. 2013;58(4):241–247.
10. Leung DY, Guttman-Yassky E. Deciphering the complexities of atopic dermatitis: shifting paradigms in treatment approaches. *J Allergy Clin Immunol*. 2014 Oct;134(4):769–79.
11. Misery L, Finlay AY, Martin N, et al. Psychological impact of skin diseases. *Br J Dermatol*. 2013;169(Suppl 1):41–44.
12. Khanna N. *Illustrated Synopsis of Dermatology & Sexually Transmitted Diseases–E-book*. Elsevier Health Sciences; 2023 Oct 9.
13. Shastri KA, *Susruta Samhita of maharshi Susruta, Part1, Reprint Edition, Varanasi, Chaukhambha Sanskrit Sansthan, 2016; Nidana Sthan 5/13, P.322*
14. Robinson CA, Love LW, Saleh HM, et al. Nummular Dermatitis. [Updated 2024 Mar 1]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-Available from: <https://www.ncbi.nlm.nih.gov/books/NBK565878/>
15. Sinikumpu S, Huilaja L, Auvinen J, Jokelainen J, Puukka K, Ruokonen A, et al. The Association Between Low Grade Systemic Inflammation and Skin Diseases: A Cross-sectional Survey in the Northern Finland Birth Cohort 1966. *Acta Dermato Venereologica*. 2018; 98(1):65–9.
16. Kurade SM, Amladi SA, Miskeen AK. Skin scraping and a potassium hydroxide mount. *Indian J Dermatol Venereol Leprol* 2006; 72:238–241
17. Ramsey ML, Rostami S. Skin Biopsy. [Updated 2023 Sep 4]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan
18. Eichenfield LF, Tom WL, Chamlin SL, Feldman SR, Hanifin JM, Simpson EL, et al. “Guidelines of care for the management of atopic dermatitis: section 1. Diagnosis and assessment of atopic dermatitis”. *Journal of the American Academy of Dermatology*. 2014; 70 (2):338 – 51
19. Brenninkmeijer EE, Schram ME, Leeflang MM, Bos JD, Spuls PI. Diagnostic criteria for atopic dermatitis: a systematic review”. *The British Journal of Dermatology*. 2018; 158 (4):754–65.
20. Williams HC, Burney PG, Pembroke AC, Hay RJ. “The U.K. Working Party’s Diagnostic Criteria for Atopic Dermatitis. III. Independent hospital validation”. *The British Journal of Dermatology*. 1994.131(3):406–16
21. Gooderham MJ, Bissonnette R, Grewal P, Lansang P, Papp KA, Hong C. Approach to the Assessment and Management of Adult Patients With Atopic Dermatitis: A Consensus Document. Section II: Tools for Assessing the Severity of Atopic Dermatitis. *Journal of Cutaneous Medicine and Surgery*. 2018; 22(1 suppl):10S–16S.
22. Berth-Jones J. Six Area, Six Sign Atopic Dermatitis (SASSAD) severity score: a simple system for monitoring disease activity in atopic dermatitis. *Br J Dermatol*. 1996;135(suppl 48): 25–30.

23. Suresh S, Kaliyadan F. Assessing eczema severity: A comprehensive review of scoring systems. *Indian J Skin Allergy*. 2025;4:19-24. doi: 10.25259/IJSA_50_2024.
24. Ahmad F, Ram Yadav C, Yadav S. Impact of Stress on Skin Disorders: Ayurveda & Yoga for Holistic Healing. *International Journal of Advanced Research [Internet]*. 2025 May 31 [cited 2025 Jul 4]; 13(05):1399–405.
25. Chavan S E, Shrivastava Gaurav, Gupta RG, Patel M R (2025) Efficacy of Virechana Karma by Patolmooladi Kashayam: A Pilot Study. *Journal of Neonatal Surgery*, 14 (32s), 776-787.
26. Ministry of Ayush. National List of Essential Ayush Medicines. Available from: [https://upayushsociety.com/doc/GO/New%20EDL%20\(NLEAM\)-%20A+H+U.pdf](https://upayushsociety.com/doc/GO/New%20EDL%20(NLEAM)-%20A+H+U.pdf)
27. P Nandurkar D, R Chavhan K, A conceptual review on the efficacy of Agnitundi Vati in the management of Gridhrasi w.s.r. to Sciatica. *J Ayu Int Med Sci*. 2024;9(2):113-116. Available From <https://jaims.in/jaims/article/view/3120>
28. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Vol. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.308-309.
29. Gupta KA, editor. Ashtanga Hridaya of Vagbhata. 12th ed. Varanasi: Chaukhamba Sanskrit Sansthan; 1997. p. 420
30. Khushwaha HCS, Charakasamhita of Agnivesa Ayurveda Dipikas Ayusi hindi commentary. 1st ed. Varanasi. Chaukhamba orientalia; 2009. P.777
31. Anonymous. Sahasrayoga. 1st ed. New Delhi: Central Council for Research in Ayurvedic Sciences; 1990. P. 79 .Edited by Mahendrapal Singh Arya
32. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Vol. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.270
33. Anonymous. Ayurvedic Formulary of India. Part -1, 2nd ed. Government of India, Ministry of Health and Family Welfare; 2003. p.22
34. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Vol. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.283-285
35. Rajani CH, Belavadi S. A comparative clinical study to evaluate the effect of madhusnuhi rasayana and shiva gutika in kitibha kushta with special reference to psoriasis. *JAHM [Internet]*. 2023 May 19 [cited 2025 Jul. 10]; 11(4). Available from: <https://jahm.co.in/index.php/jahm/article/view/750>
36. Gupta KA, editor. Ashtanga Hridaya of Vagbhata. 12th ed. Varanasi: Chaukhamba Sanskrit Sansthan; 1997. P.599.
37. Government of India. The Ayurvedic Pharmacopoeia of India. 1st English ed. Vol. 2. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2000. P.81-83
38. Anonymous. Sahasrayoga. 1st ed. New Delhi: Central Council for Research in Ayurvedic Sciences; 1990. P.43 . Edited by Mahendrapal Singh Arya
39. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Vol. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.523-524.
40. Gupta KA, editor. Ashtanga Hridaya of Vagbhata. 12th ed. Varanasi: Chaukhamba Sanskrit Sansthan; 1997. p. 577
41. Sharma A, Dixit H, Sharma P L, Singh G . Conceptual Review on Efficacy of Visha Taila in the Management of Vicharchika. *Ayushdhara [Internet]*. 2025 Mar. 20 [cited 2025 Jul. 14]; 12(1):1-11.
42. Tripathi B, Ashtang Hridaya of Srimadvagbhata, Reprint edition, Delhi, Chaukhamba Sanskrit Pratisansthan, 2012; Chikitsa Sthan 19/96, p.794.

43. Ministry of Ayush. National List of Essential Ayush Medicine. Available from: [https://upayushsociety.com/doc/GO/New%20EDL%20\(NLEAM\)-%20A+H+U.pdf](https://upayushsociety.com/doc/GO/New%20EDL%20(NLEAM)-%20A+H+U.pdf)
44. Anonymous. Sahasrayoga. 1st ed. New Delhi: Central Council for Research in Ayurvedic Sciences; 1990. P.50 . Edited by Mahendrapal Singh Arya
45. Anonymous. Sahasrayoga. 1st ed. New Delhi: Central Council for Research in Ayurvedic Sciences; 1990. P. 66. Edited by Mahendrapal Singh Arya
46. Hegde D, Bhargav PH, Bhargav H, Babu H, Varsha KA, Raghuram N. Feasibility and Pilot Efficacy Testing of Integrated Yoga and Shirodhara (Ayurvedic Oil-Dripping) Intervention on Clinical Symptoms, Cognitive Functions and Sleep Quality of Adults with Anxiety Disorder. *Int J Yoga*. 2020 Jan-Apr;13(1):32-41. doi: 10.4103/ijoy.IJOY_44_19. PMID: 32030019; PMCID: PMC6937873.
47. Rajani, C. H., & Belavadi, S. (2023). A comparative clinical study to evaluate the effect of madhusnuhi rasayana and shiva gutika in kitibha kushta with special reference to psoriasis. *Journal of Ayurveda and Holistic Medicine (JAHM)*, 11(4).
<https://doi.org/10.70066/jahm.v11i4.750>.
48. Anonymous. Sahasrayoga. 1st ed. New Delhi: Central Council for Research in Ayurvedic Sciences; 1990. P. 250 . Edited by Mahendrapal Singh Arya
49. Anonymous. Sahasrayoga. 1st ed. New Delhi: Central Council for Research in Ayurvedic Sciences; 1990. P.43 . Edited by Mahendrapal Singh Arya
50. Tripathi B. Ashtang Hridaya of Srimadvagbhata, Reprint edition, Delhi, Chaukhambha Sanskrit Pratisansthan, 2012; Chikitsa Sthan 19/31-32, p.788.
51. Anonymous. Sahasrayoga. 1st ed. New Delhi: Central Council for Research in Ayurvedic Sciences; 1990. P. 298 . Edited by Mahendrapal Singh Arya
52. Ministry of Ayush. National List of Essential Ayush Medicine. Available from: [https://upayushsociety.com/doc/GO/New%20EDL%20\(NLEAM\)-%20A+H+U.pdf](https://upayushsociety.com/doc/GO/New%20EDL%20(NLEAM)-%20A+H+U.pdf)
53. Ayurvedic Formulary of India (eAFI). Part II: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: ebook via “eAyu: Formulary of India” (online repository) p.131
54. Sena V. Pathyapathya Vinischaya. In: Kishore P, Padi MM, editors. New Delhi: Central Council for Research in Ayurveda & Siddha; 1999. p. 82–3.
55. Babu DR, Padhi MM, editors. Handbook of Anupana, Pathya and Apathya. New Delhi: National Institute of medical heritage, Central Council for Research in Ayurvedic Sciences; 2012. p. 130.
56. Anonymous. Ayurvedic Formulary of India. Part -1, 7:37, 2nd ed. Government of India, Ministry of Health and Family Welfare; 2003. p.353
57. Anonymous. Ayurvedic Formulary of India. Part -1, 7:30, 2nd ed. Government of India, Ministry of Health and Family Welfare; 2003. p. 344
58. Salethoor SN, Kulangara S, Aramya AR, Puthiyedath R. Ayurvedic management of a refractory skin disease clinically diagnosed as Cutaneous Lichen Planus-A case report. *J Ayurveda Integr Med*. 2024 Mar-Apr;15(2):100884. doi: 10.1016/j.jaim.2023.100884. Epub 2024 Mar 20. PMID: 38513503; PMCID: PMC10972801
59. Bairwa VK, Kashyap AK, Meena P, Jain BP. Triphala's characteristics and potential therapeutic uses in modern health. *Int J Physiol Pathophysiol Pharmacol*. 2025 Apr 25;17(2):19-36. doi: 10.62347/OBSS5026. PMID: 40401115; PMCID: PMC12089839

02

DERMATOPHYTOSIS

(दद्रु कुष्ठ)



DERMATOPHYTOSIS

ICD-10 code: B-35

ICD-11 code: 1F28

ICDTM11 - SN4

National Ayurveda Morbidity Code

ED-4 - *Kustha*

ED-4.3 –*Kshudra Kustha*

ED-4.3.6 – *Dadru-Kustha*

CASE DEFINITION

Superficial infection caused by a dermatophyte is known as Dermatophytosis or ringworm infection. This term is a misnomer because worms are not involved¹ “Tinea”, the Latin name for worm, describes the serpentine appearance of the skin lesions².

As per Ayurveda, *Dadru* is characterised by *Kanduh* [associated with itching sensation], *Ragah* [reddish nodules], *Tamra VarnaPidka* [copper coloured papule/eruptions], *Udgata Mandalam/UtsannaMandalata* [elevated ring-shaped plaque], *Dirgha Pratana* [spreading out], *Durvavat*[resembling *Durva*], *Atasi Kusuma Chhavi* [resembling the flower of *Atasi*], *Anushangi* [chronic /associated over a long period]³

INTRODUCTION (incidence/prevalence /morbidity/mortality/risk factors)

- Dermatophytes (keratinophilic fungi) are the most common cutaneous fungal infections seen in humans affecting skin, hairs and nails with a considerable morbidity.⁴
- According to World Health Organization (WHO), the prevalence rate of superficial mycotic infection worldwide has been found to be 20-25%.
- Its prevalence varies in different countries. It is more prevalent in tropical and subtropical countries like India where the heat and humidity are high for most part of the year.^{5,6} Community - based surveys and dermatology outpatient data show 20-30% prevalence, especially in humid regions. In some areas, up to 50-60% of dermatology OPD cases are due to dermatophytosis.
- An epidemic of recalcitrant dermatophyte infection has engulfed India and many part of the world and the species that is dominant has been controversially named as *Trichophyton indotinae*⁷. This is resistant to many front-line drugs. This has led to an alteration in the immunity⁸. A National Task force was formed which details the cause of recalcitrant infection as below. Notably steroid abuse has lead to varied forms of Tinea classically tinea incognito and majocchi variant which do not respond to conventional agents.
- Factors implicated in recalcitrant dermatophytosis⁹
 - Clinical type of tinea
 - Fungal species- *Trichophyton indotinae*
 - Host Immunity
 - Resistance

- The new species *Trichophyton Indotinea* has unique mechanisms of resistance and is fast becoming the most dominant variety of dermatophytosis in India.
- Chronic and recurrent cases have increased significantly in the last 5-10 years due to overuse of topical steroids and antifungal creams which have made them resistant to common antifungal drugs.
- Dermatophytosis is not life threatening, but it causes severe itching and discomfort, social embarrassment and stigma, sleep disturbances, work absenteeism and reduced productivity.
- Study using DLQI (Dermatology Life Quality Index) shows moderate to severe impact on quality of life in 40-60% of chronic/ recurrent cases. Psychological stress, anxiety and low self-esteem are common.^{10,11}

All skin diseases in Ayurveda have been classified under the broad heading of “*Kustha*” which are further categorized in to *Mahakustha* & *Kshudrakustha*¹². As per Acharyas, *Dadru* is a skin disease which is characterized by circular erythematous patches (*Mandala*), itching (*Kandu*), burning sensation (*Daha*), redness (*Raga*), and eruption of elevated lesions (*Utsanna Mandala*)- which mirror the clinical features of *Tinea corporis* and *cruris*. The *Sthana* (site of occurrence) of the *Dadrukustha* is fourth layer of skin and the doshic predominance is kapha pitta.¹³ Acharya Charaka included *Dadru* among *kshudrakustha* while Acharya Susrutha has classified *Dadru* among *Mahakusthas*, Acharya Vagbhata highlighted the *Anushangi* nature of *Dadrukustha* and the spread resembling *Durva* grass. The symptoms of *Daha* (Burning sensation) and *Srava* (discharge) are also associated symptoms of the disease.

CLINICAL PRESENTATION^{14,15,16}

Typical Lesion-

- A typical lesion of dermatophytosis is an annular or arcuate plaque which spreads centrifugally (away from the centre).
- The edge is active, showing papulo-vesiculation, pustulation and scaling, while the centre is usually relatively clear.
- In chronic lesion there may be nodules, hyperpigmentation and even lichenification (thickening, hyperpigmentation and increased skin markings) in the centre.
- In India due to steroid abuse altered morphologies including *Tinea incognito* and *Majocchi Granuloma* are seen . Fig 1



Figure 1: Follicular papules in a lesion of *tinea corporis* seen in *Majocchi Granuloma*

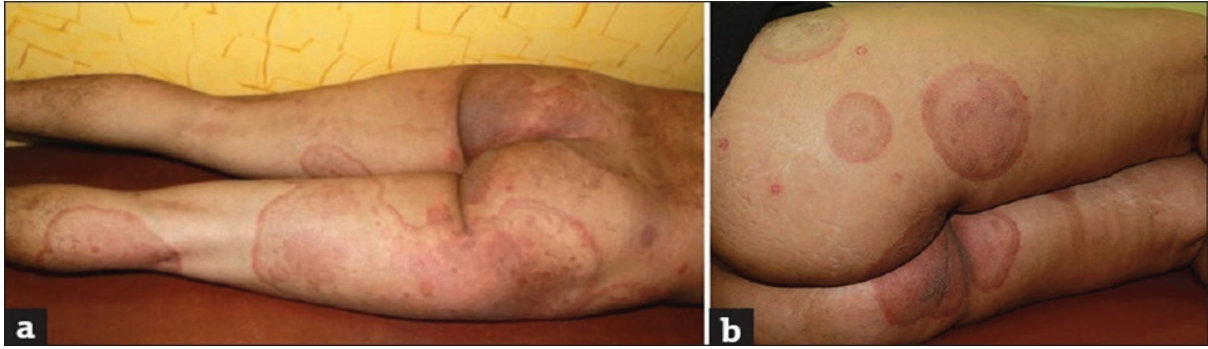


Figure 2:(a & b) Large sized, erythematous patches with active border over the gluteal regions and legs. (Figure 1 & 2: Courtesy: Verma et al. Indian J Dermatol 2017; 62:227-36)

- a) As *T. indotinae* has become a dominant cause of *Tinea corporis*. Specific features of this variant are now well described and are listed in the Table below.
- b) **Asymptomatic tinea carriers**- are defined as individuals in which dermatophytes are identified, even though no clinical signs are observed. Anthropophilic species adapt more easily to the host and induce a weaker immune response.
- c) **Sites of Infection**- on the basis of site of infection, can present as *Tinea corporis* (body); *Tinea cruris* (groin); *Tinea capitis* (scalp); *Tinea pedis* (feet); *Tinea manuum* (hands); *Tinea unguium* (nails); *Tinea barbae* (bearded area)

Dadru typically presents with red, circular patches on the skin that are raised and itchy. The main symptoms include intense itching (*kandu*), reddish discoloration (*raga*), small eruptions or papules (*pidaka*), and ring-shaped raised lesions (*utsanna mandala* *Pari Mandala*). These lesions often spread gradually and may resemble the Flax flower (*Atasi Pushpa*) or Bermuda Grass (*Durva*). In some cases, burning sensation, scaling, or oozing can occur.^{17,18}

According to Dalhaṇa, *Dadru* is of two types: *Sita* (white), *Asita* (black)¹⁹. *Asita Dadru* is considered difficult to treat due to its severity, deep tissue involvement, and chronic nature. In contrast, *Sita Dadru* is easily curable, superficial, and causes milder symptoms. *Dadru Kushtha* rarely has complications; improper treatment can lead to further *Dosha Dushti* (vitiation of *Dosha*), causing increased *Dhatu* involvement and chronicity. *Dadru Kushtha* generally has good prognosis.

CLINICAL EXAMINATION¹¹

A thorough clinical examination helps to diagnose, classify and differentiate from other dermatoses.

General Inspection

It includes observation of site(s) of infection, number, size and distribution of lesion. Common sites include groin, axillae, trunk, face, feet, hands, nails, scalp. Ask about onset, progression, recurrence, family history and steroid/ antifungal use.

1. Local Examination

Table 1:

Features	Description
Shape	Annular (ring like), circular/oval.
Border	Well defined, raised, erythematous, active margin.
Colour	Redness.
Distribution	Examine the location and extent of lesions
Centre	May appear normal or hypopigmented.
Scaling	Present especially at margin.
Itching	Usually intense pruritus, especially at night.
Coalescence	Lesion may merge into each other in long standing cases.
Lichenification	In chronic steroid modified cases.
Inflammation	Degree of inflammation (redness, swelling)

2. Region Specific Examination

Table 2:

Type	Clinical Sign
Tinea corporis (body)	Ringworm lesion on trunk/ limbs, raised scaly borders, presents as circumscribed lesions with a wide variety of appearances, including scales, vesicles, and pustules.
Tinea cruris (groin)	Red itchy rash in groin/ thighs, often bilateral.
Tinea capitis (scalp)	Patchy hair loss, inflammation, black dots, scaling, boggy swellings (kerion), broken hair.
Tinea pedis (feet)	Scaling, fissures between toes, moccasin – type dryness, cracked skin between toes (itching and inflammation).
Tinea manuum (hands)	Typically involves One hand, dry scaling, hyperkeratosis or blistering.
Tinea unguium (nails)	Thickened, brittle, discoloured nails, onycholysis.
Tinea faciei (face)	Erythematous plaques, often aggravated by sun or steroids.
Tinea barbae (bearded area)	Dermatophytosis of the bearded area, appears as a pustular folliculitis.

Clinical examination of *Dadru* can be done by observing the signs and symptoms of the disease i.e.;

1. Intense itching (*Kandu*),
2. Reddish discolouration (*Raga*),
3. Small eruptions or papules (*Pidaka*), and

4. Elevated, annular lesions (*Utsanna mandala, Parimandalata*).
5. Bluish colour (*Atasi Pushpa Varna*)/ Coppery red colour (*Tamra Varna*)
6. Fast spreading (Spreading like *Durva*)
7. *Anushangi* (Chronic, Relapsing)

Examination involves examination by *Darshana* (Inspection), *Sparshana* (Touch/Palpation) and *Prashna* (history taking).

A. *Darshana Pareeksha* (Inspection) Appearance, extension and dimensions of visible disease should be observed.

B. *Sparshana Pareeksha* (Palpation)- Generally *Sparshana Pariksha* is not required.

C. *Prashana Pareeksha* (Questioning)- A physician must ask about nature, intensity, aggravating factors, onset, duration and frequency of disease, *Agni, Bala, Aahara-Vihara* and other factors to assess the *Roga* and *Rogi Bala*.

DIFFERENTIAL DIAGNOSIS^{20,21}

Table 3:

Differential diagnosis	Distinguishing features
Tinea corporis (annular lesions with well-defined, scaly, often reddish margins; commonly pruritic)	
Annular psoriasis	Gray or silver scale; nail pitting; 5-10% of affected individuals have family history of psoriasis ²
Atopic dermatitis	Personal or family history of atopy; less likely to have active border with central clearing; lesions may be lichenified.
Erythema multiforme	Target lesions; acute onset; no scale; may have oral lesions.
Fixed drug eruption	Dusky; erythematous; usually single, non-scaly lesion; most often triggered by sulfa, acetaminophen, ibuprofen, or antibiotic use.
Granuloma annulare	No scale, vesicles, or pustules; nonpruritic; smooth; commonly on dorsum of hands or feet.
Lupus erythematosus (sub-acute cutaneous)	Sun-exposed areas; multiple annular atrophied lesions; female-to-male ratio 3:1 ³
Nummular eczema	More confluent scale; less likely to have central clearing. Mostly situated on the extensor surface of extremities.
Pityriasis rosea herald patch	Typically, an adolescent with a single lesion on neck, trunk, or proximal extremity; pruritus of herald patch is less common; progression to generalized rash in one to three weeks.
Seborrheic dermatitis	Greasy scale on erythematous base with typical distribution involving nasolabial folds, hairline, eyebrows, postauricular folds, chest; annular lesions less common.
Secondary syphilis	It may present with annular lesions, but also involves other areas like palms, soles and mucous membranes.

Differential diagnosis	Distinguishing features
Tinea cruris (usually occurs in male adolescents and young men; spares scrotum and penis)	
Candidal intertrigo	Involves scrotum; satellite lesions; uniformly red without central clearing.
Erythrasma	It is a bacterial infection presenting as red-brown patches without an active border, showing coral-red fluorescence under Wood's lamp examination.
Inverse psoriasis	Red and sharply demarcated; may have other signs of psoriasis such as nail pitting.
Seborrheic dermatitis	Greasy scale on erythematous base with typical distribution involving nasolabial folds, hairline, eyebrows, postauricular folds, chest; annular lesions less common.
Lichen simplex chronicus	Thickened itchy skin due to chronic scratching.
Contact dermatitis	It can cause similar itching and redness in the groin area.
Tinea pedis (Erythema, scale, fissures, maceration; itching between toes extending to sole, borders, and occasionally dorsum of foot; may be accompanied by tinea manuum ["one-hand, two-feet" involvement] or onychomycosis)	
Contact dermatitis	Distribution may match footwear; usually spares interdigital skin.
Dyshidrotic eczema	"Tapioca pudding" vesicles on lateral aspects of digits; often involves hands.
Foot eczema	May have atopic history; usually spares interdigital skin.
Juvenile plantar dermatosis	Shiny taut skin involving great toe, ball of foot, and heel; usually spares interdigital skin.
Psoriasis	Involvement of other sites; grey or silver scale; nail pitting; 5-10% of affected children have family history of psoriasis ² .
Tinea capitis (one or more patches of alopecia, scale, erythema, pustules, tenderness, pruritus, with cervical and suboccipital lymphadenopathy)	
Alopecia areata	Discrete patches of hair loss with no epidermal changes (i.e., no scale); total loss of hair or fine miniature hair growth; exclamation point hairs; no crusting; no inflammation; possible nail pitting.
Systemic lupus erythematosus (SLE)	It can affect the scalp causing hair loss and inflammation.
Atopic dermatitis	Personal history or family history of atopy; less often annular; lymphadenopathy uncommon; alopecia less common.
Bacterial scalp abscess	Alopecia less likely; hair pluck is painful.
Psoriasis	Gray or silver scale; nail pitting; 70% of affected children have family history of psoriasis ² ; involvement of other sites.

Differential diagnosis	Distinguishing features
Seborrheic dermatitis	Alopecia uncommon; lymphadenopathy uncommon; greasy scale; typical distribution involving nasolabial folds, hairline, eyebrows, postauricular folds, chest.
Trichotillomania	No scale; commonly involves eyelashes and eyebrows; hairs of varying lengths.
Tinea unguium (Onychomycosis) (discoloured [white, yellow, brown], thickened nail with subungual keratinous debris and possible nail detachment; often starting with great toe but can involve any nail)	
Other nail dystrophies, most commonly associated with repeated low-grade trauma, psoriasis, or lichen planus	Appearance can be indistinguishable from onychomycosis; may have other manifestations of alternate diagnosis
Pityriasis versicolor, is a frequent, benign, superficial fungal infection of the skin. It belongs to Malassezia-related diseases. Clinical features of pityriasis versicolor include either hyperpigmented or hypopigmented finely scaly macules. The most frequently affected sites are the trunk, neck, and proximal extremities²²	

Differential Diagnosis – Ayurveda

Table 4: Differential Diagnosis - Mandala *Kushta* and Dadru



Mandala Kushta



Dadru Kushta

Feature	Mandala Kushtha	Dadru Kushtha
Similarities		
Shape of lesion	Mandala (circular)	Mandala (circular)
Elevation	Utsanna (raised)	Udgata (raised)
Itching (Kandu)	Bahukandu	Kandumati (itchy)
Dissimilarities		
Colour	Śveta / Rakta / Śvetarakta	Atasi-kusuma (bluish-grey), Raktapiḍakā, Tamra Pidaka

Feature	Mandala Kushtha	Dadru Kushtha
Speed of Spread	Anāśuga (slow)	Dūrvāvat – spreads in clusters on surface
Srāva (Discharge)	Bahusrāva	Srāva secondary to itching
Texture	Ślakṣṇa, Sthirā, Styāna (smooth, stable)	Paruṣa/ Rūkṣa (rough), may have Kleda from sweat
Margins	Thick and Pītābha (yellowish)	-
Presence of Krimi	Bahukrimi	-
Chronicity	-	Anuṣangi (chronic)

Table 5: Differential Diagnosis with other conditions having *Kandu* and *Pidika*

Disease	Symptoms	Photograph
Vicharchika (Eczema)	<i>Kandu</i> <i>Bahusraava Yukta Pidika</i> <i>Shyava Varna</i>	
Paama (Scabies)	<i>Kandu</i> <i>Paridaaha,</i> <i>Shweta, Aruna, Shyava Pidika</i>	
Dadru (Tinea infection)	<i>Kandu</i> <i>Atasi pushpa varna like Pidika,</i> <i>Utasanna mandala (round patches)</i>	

SUPPORTIVE INVESTIGATIONS ^{23,24}

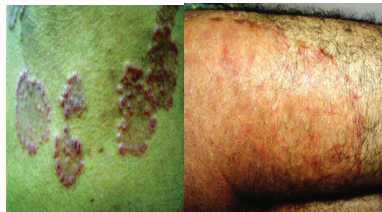
Table 6:

Test	Description
Essential	
Potassium hydroxide (KOH) Scraping-Simple, inexpensive, quick and sensitive test.	Interpretation of KOH mount. a) <i>T. capitis</i>: Branching hyphae, Spores within or around the hair. b) <i>T. cruris</i>: Branching hyphae. c) <i>T. corporis</i>: Branching hyphae.

Test	Description
Advanced	
Cultures	Cultures need to be done when clinical suspicion is strong and KOH mount is negative or when it is necessary to identify the fungal species, Sabouraud dextrose agar medium is used. Microscopic morphology of microconidia & macroconidia, along with surface topography & pigmentation.
Wood's Light	It is useful method of screening outbreaks of T. Capitis in schools. Wood's light fluoresces infected scalp hair in tinea capitis caused by certain species, not in all, but infected skin does not show fluorescence.
Dermatophyte test medium	Scales from the advancing border, subungual debris or affected hair embedded in the medium.
Histopathology special stains	Periodic acid- Schiff & Grocott's methenamine silver are used. Tissue by skin or nail biopsy are obtained.
Biopsy or Polymerase Chain Reaction (PCR)	They are used to confirm the types and extent of infection.

DIAGNOSTIC CRITERIA^{20,24,25}

Table 7:

Type	Description	Image
Tinea corporis/cruris	Annular or arcuate lesion with periphery showing papulo-vesiculation with itching and scaling.	
Tinea capitis	Pink, scaling itchy patches on the scalp skin and areas of hair loss due to the breakage of hair shafts, round scaling area of alopecia.	
Tinea unguium	Yellowish discolouration of nail plate which may show crumbling or is thickened. Asymmetrical involvement of few nails.	
Tinea pedis	Vesicular, with itchy vesicles occurring on the sides of the feet on a background of erythema., interdigital maceration.	

Type	Description	Image
Tinea manuum	Dull red with silvery scales in the palmar creases.	

(Figures-Courtesy: Khanna N. Illustrated synopsis of dermatology and sexually transmitted diseases. 4th edition; 2011)

Evaluation and Assessment

The Dermatology Life Quality Index (DLQI) is a practical 10-question tool assessing the impact of skin disease on patients' lives, scored from 0 to 30, with higher scores indicating greater impairment.²⁶

The Dermatology-specific Quality of Life (DSQL) instrument measures physical, psychological, and social limitations through 36 items, focusing on disease-specific impacts.²⁷

Skindex-16 is a validated 16-item questionnaire scored on a 0–6 Likert scale, evaluating the effects of skin diseases on quality of life, with lower scores indicating better QoL.²⁸

Table 8: Clinical Diagnostic criteria as per Ayurveda

Sr. No	Sign & Symptoms	Interpretation
1.	<i>Kandu</i>	(itching/ pruritus)
2.	<i>Raga</i>	(redness/ erythema)
3.	<i>Atasi pushp vat pidika</i>	(popular rashes similar to flax flower)
4.	<i>Tamra varna pidika</i>	(copper-coloured popular rashes)
5.	<i>Visarpanipidika</i>	(diffused popular rashes)
6.	<i>Dirgha pratana</i>	(tendrill-like popular rashes)
7.	<i>Unnata mandala – Pari Mandala</i>	Annular lesions

PRINCIPLES OF MANAGEMENT

- सर्वत्रिदोषजंकुष्ठदोषाणांतुबलाबलम्।
यथास्वैर्लक्षणैर्बुद्ध्वाकुष्ठानांक्रियतेक्रिया॥ Ch.chi.7/31-
- दोषस्ययस्यपश्येत्कुष्ठेषुविशेषलिङ्गमद्रिक्तम्।
तस्यैवशमंकुर्यात्ततःपरंचानुबन्धस्य॥ Ch.chi.7/32

There is no specific treatment protocol prescribed in the Samhitas exclusively for Dadru. But the general therapeutic principles for *Kustha* are applicable to all types of *Kustha*. Acharya Charaka has mentioned that all the three doshas are involved in pathogenesis of all types of *Kustha*. Depending on the predominant *Dosha*, symptoms are manifested,

treatment should be decided on the basis of symptoms shown in the specific *Kushtha*. The *Dosha* presenting important and specific symptoms should be alleviated at first, followed by the treatment of the associated *Dosha*.²⁹

When the lesions are limited to skin, it can be treated under the line of treatment of *Kustha Roga* and *Rakta Pradoshaja Vikara*³⁰

Red Flag signs

These signs should be assessed before initiating treatment-

- Secondary bacterial infection.
- Intractable alopecia cases causing permanent hair loss in tinea capitis
- Uncontrolled Diabetes-mellitus
- Lower extremity cellulitis in cases of tinea pedis.
- Underlying severe immunodeficiency due to HIV/AIDS.
- Severe wide spread infection causing significant pain or inflammation or eczematization irrespective of treatment.

(A) Prevention Management:

Avoidance of the etiological factors mentioned in *Kustharoga nidana*(food, dietary habits, lifestyle and behavioural characters) is the most important preventive measure.

Other preventive measures:

- Following *Dinacharya*, *Ritucharya*, and *Sadvritta*.

Yoga

Yoga practice plays a supportive role by:

- Boosting immunity
- Reducing stress. (which can worsen fungal infection)
- Enhancing blood circulation to the skin.
- Supportive detoxification and hormonal balance.

Yoga can play a supportive role in prevention by enhancing overall immunity and promoting skin health. Regular practice of asanas like *Shavasana*, *Padmasana*, *Sidhasana*, *Makarasana*, and *Suryanamaskara* improves blood circulation and detoxification, helping to maintain healthy skin. *Pranayama* and meditation reduce stress, which is known to lower immunity and increase susceptibility to infections. *Shat kriya* and *yoga nidra* helps in deep relaxation for immune system repair.

(B) Curative Interventions:

The list of medications that are used in the management of the *Dadru Kustha* is as follows:

Table 9: Ayurvedic Formulations for Management of *Dadru Kushtha*

INTERNAL MEDICATIONS						
1.	<i>Aragwadhadi Kwatha</i> ³¹	Kwath	25-50 ml	Empty stomach Morning & evening	*	Warm water
2.	<i>Brihat manjishthadi Kwatha</i> ³²	Kwath	25-50 ml	Empty stomach Morning & evening	*	Warm water
3.	<i>Khadiradi Kwatha</i> ³³	Kwatha	25-50 ml	Empty stomach Morning & evening	*	Warm water + Ghrita
4.	<i>Patolamooladi Kwatha</i> ³⁴	Kwath	25-50 ml	Empty stomach Morning & evening	*	Warm water
5.	<i>Guduchi churna</i> ³⁵	Churna	3-6 gm	After meal Twice a day	*	Honey / Lukewarm water
6.	<i>Gandhak Rasayanam</i> ³⁶	Churna	1-3 gm	Twice a day	*	Water
7.	<i>Madhusnuhi Churna</i> ³⁷	Churna	3-6 gm	After meal Twice a day	*	Honey / Lukewarm water
8.	<i>Panchnimba Churna</i> ³⁸	Churna	3-5 gm	After meal Twice a day	*	Honey / Lukewarm water/khadir and Asana Kwatha
9.	<i>Triphala Churna</i> ³⁹	Churna	3-6 gm	After meal Twice a day	*	Honey / Lukewarm water
10.	<i>Aragvadarishta</i> ⁴⁰	Arishta	15–25 ml	After meals	*	Equal qty warm water
11.	<i>Khadirarishta</i> ⁴¹	Arishta	15–25 ml	After meals	*	Equal qty warm water
12.	<i>Ushirasava</i> ⁴²	Asava	15–25 ml	Twice a day	*	water (equal amount)
13.	<i>Haridrakhanda Paka</i> ⁴³	Khandapaka	6 gm	Twice a day	*	Water or milk
14.	<i>Mahabhallataka Avaleha</i> ⁴⁴	Avaleha	5-15 gm	Once a day	*	Guduchi Swaras/ Godugdha
15.	<i>Amrita Guggulu</i> ⁴⁵	Guggulu	500 mg to 1 gm	After meal Twice a day	*	With warm water

16.	<i>Kaishora Guggulu</i> ⁴⁶	Guggulu	500 mg to 1 gm	After meal Twice a day	*	With warm water
17.	<i>Mahatiktak Ghrita</i> ⁴⁷	Ghrita	10-15 gm	Empty stomach Once or twice a day	*	With warm water
18.	<i>Nimbadi Ghrita</i> ^{48,49}	Ghrita	10-15 gm	Empty stomach Once or twice a day	*	With warm water
19.	<i>Panchtikta Ghrita</i> ⁵⁰	Ghrita	5-10 gm	Empty stomach Once a day	*	With warm water/ milk
20.	<i>Arogya Vardhini Vati/ Rasa</i> ⁵¹	Rasa	250-500 mg	After meal twice a day	8-12 weeks	With honey/warm water/Ardraakswaras
21.	<i>Rasamanikya</i> ⁵²	Rasa	125 mg	After meals Once/Twice a day	4-6 weeks	Honey

EXTERNAL MEDICATIONS

1.	<i>Edgajadi Lepa</i> ⁵³	Lepa	As required	Topical	*	Takra/water/ Kanji
2.	<i>Dadrughna lepa</i>	Lepa	As required	Topical		Application with Nimbu rasa
3.	<i>Mahamarichyadi Taila</i> ⁵⁴	Taila	As required	Local application	*	External use only
4.	<i>Nalpamaradi Taila</i> ⁵⁵	Taila	As required	Local application	*	External use only
5.	<i>Tuvarak Taila</i> ⁵⁶	Taila	As required	Local application	*	External use only
6.	<i>Vrananashaka Taila</i> ⁵⁷	Taila	As required	Local application	*	External use only
7.	<i>Dadruvidravan Malahar</i> ⁵⁸	Malahar	As required	Local application	Regular	External use only
8.	<i>Gandhakadya Malahar</i> ⁵⁹	Malahar	As required	Local application	Regular	External use only
9.	<i>Nimba churna</i>	Churna	As required	Sprinkle (Can be used for kshalana and Avagaha as well)	*	External use only

10.	<i>Panchavalkal Churna</i>	Churna	As required	Sprinkle(Can be used for kshalana and Avagaha as well)	*	External use only
11.	<i>Triphala Churna</i>	Churna	As required	Sprinkle(Can be used for kshalana and Avagaha as well)	*	External use only
12.	<i>Tankana Bhasma</i>	Bhasma	As required	Sprinkle	*	External use only

NOTE: Out of the drugs mentioned above any one of the drugs or in the combination may be prescribed by the physician. The duration of the treatment may vary from patient to patient. Physician should decide the dosage (per dose) and duration of the therapy based on the clinical findings and response to therapy.

At Level 1: [Solo Physician Clinic/Health & Health Clinic/PHC (Optimal Standard of treatment in situation where technology and resources are limited)]

Dadru with mild to moderate severity, without signs of involvement of deeper tissues (*Gambhir dhatu*) and involvement of single or two *doshas*.

Clinical Diagnosis

The diagnosis of tinea is primarily clinical and made after physical dermatological examination. However, some investigations, like a complete hemogram, and KOH mount may be done. Assessment according to Dermatology Life Quality Index (DLQI), Dermatology-specific Quality of Life (DSQL), SKINDEX-16.

At level 1, diagnosis is based on clinical signs and symptoms i.e. *Kandu*(itching/pruritus) *Raga*(redness/erythema), *Atasi pushpavat pidika* (macular rashes similar to flax flower) *Tamra varna pidika* (copper-coloured macular rashes), *Visarpanipidika* (diffused macular rashes), *Dirgha Pratana* (tendrill-like macular rashes), *Unnata mandala – Pari Mandala* (Annular lesions).

Management

At level 1, curative intervention is solely based on the *Shamana* protocol or *Mrudu Shodhana* with *Haritaki*, *Triphala*, etc. Internal & External Ayurvedic formulations, as mentioned in Table No 9 can be used.

Preferable and Restricted Diet & Lifestyle

Table 10: Pathya-Apathya (Do's & Don'ts) for *Kushtha** (Skin Disorders)^{60,61}

Pathya/ Do's	Apathya / Don'ts
1. <i>Laghu anna</i> (Light food) 2. <i>Tikta shaka</i> (green leafy vegetables) 3. <i>Ghrita</i> (Ghee) 4. <i>Mudga</i> (Green gram) 5. <i>Aadaki</i> (Pigeon pea) 6. <i>Yava</i> (barley) 7. <i>Godhooma</i> (wheat) 8. <i>Madhu</i> (Honey) 9. <i>Sali</i> (Rice) 10. <i>Karkati</i> (Cucumber) 11. <i>Triphala</i> (Combination of <i>Haritaki</i> (<i>Terminalia chebula</i>), <i>Bibhitaki</i> (<i>Terminalia bellirica</i> or <i>Baheda</i>) and <i>Amalaki</i> (<i>Embllica officinalis</i> or <i>Amla</i>)) 12. <i>Patola</i> (Snake gourd) 13. <i>Kakamachi</i> (Black night shade) 14. <i>Nimbapatra</i> (Neem leaves) 15. <i>Lasuna</i> (garlic) 16. <i>Punarnava</i> (spreading hogweed) 17. <i>Khadira</i> (Black catechu) 18. <i>Tila Taila</i> (gingelly oil)	1. <i>Dugdha</i> (milk), 2. <i>Dadhi</i> (curd), 3. <i>Kulatha</i> (horse gram), 4. <i>Masha</i> (black gram), 5. <i>Nishpava</i> (green peas), 6. <i>Ikshu</i> (sugarcane), 7. <i>Amla Rasa</i> (sour fruits), 8. <i>Virudha Ahara</i> (incompatible food), 9. <i>Adhyasana</i> (taking food before the earlier food gets digested), 10. <i>Ajeerna</i> (indigestion), 11. <i>Vishamasana</i> (untimely food) 12. <i>Vidahi</i> burning sensation), <i>vishtambhi</i> and (<i>Abhishyandiahara</i>) 13. <i>Matsya</i> (fish) 14. <i>Guda</i> (jaggery) 15. <i>Tila</i> (sesame) 16. <i>Mulaka</i> (Radish)
Vihara- Apathya	
1. <i>Vegavaraodha</i> (Suppression of natural urges) 2. <i>Atapaseva</i> (Over exposure to Sun) 3. Drinking cold water after direct exposure to the sun and after exertion. 4. Consuming food before the complete digestion of the previous meal. 5. Day sleep 6. Stress 7. Doing exercise or over exertion immediately after heavy meals 8. Over exertion after <i>Snehapana</i> & <i>Vamana</i> 9. Sudden change from cold to heat or heat to cold without following the rules of gradual change 10. Sudden change from <i>Santarpana</i> to <i>Apatarpana</i> & Vice-versa 11. Improper administration of <i>Snehapana</i> and <i>Panchakarma</i> Procedures	

General Instructions

- Keep skin dry and clean, especially in areas like skin folds, armpits, and groin areas.

Hand Hygiene:

- Washing hands frequently with soap and water, especially after touching potentially contaminated surfaces or individuals.
- Don't Share towels, clothing, razors, and personal care items.

Foot Hygiene:

- Wear breathable shoes and moisture-wicking socks, especially in warm or humid weather.
- Dry feet thoroughly, particularly between the toes, after showering or swimming.
- Avoid Walking Barefoot in Public Areas:

Clothing Choices:

- Opt for loose-fitting, breathable clothing made of natural fibers like cotton, which can help prevent moisture buildup.
- Allow shoes to dry out completely between uses to prevent fungal growth.

Nail Hygiene:

- Keep nails short and clean, and avoid biting or scratching the skin, especially if you have an existing fungal infection.

Hygiene in Communal Areas:

- Wash Exercise Clothes After Each Use.

**These are general pathya-apathya guidelines to be followed in skin diseases. However, they may be tailored on a case-to-case basis, taking into account the patient's prakriti, type of Kustha, seasonal variations, and other relevant factors.*

Follow Up: Once in every 15 days or as needed, for effective management of the condition.

Referral Criteria

- No response at all after 2-3 weeks of treatment period.
- Uncontrolled comorbidities like diabetes mellitus, hypertension etc.
- Evidence of an increase in severity/complications
- Diagnostic uncertainty.
- Substantial impact on their quality of life and activities of daily living.

At Level 2: (CHC/ Small hospitals 10-20 bedded hospitals with basic facilities such as routine, investigation, X-ray)

Clinical Diagnosis: Same as level 1. The case referred from Level 1, or a fresh case must be evaluated thoroughly for any complications.

Investigations: The diagnosis would be primarily clinical. However, some investigations may be necessary to investigate complications or exclude other differential diagnoses as follows:

- Renal function test.
- Fasting lipids, glucose, and thyroid functions.

Management: If there is *Bahudoshatwa*, the patient may be admitted to a Level 2 facility for *Snehapana*, *Shodhana*, *Rakta Mokshana*, with constant monitoring and observation.

Shodhana:

- *Snehapana* (internal oleation) with dosha specific sneha followed by Swedana (fomentation)
- *Vamana* (therapeutic emesis) in Kapha predominance and Urdhwa jatrugata symptoms.
- *Virechana* (therapeutic purgation) in Pitta predominance
- *Nasya* (Nasal administration) can be effectively used in conditions affecting the scalp and to treat psychological factors.
- *Rakta mokshana* (Bloodletting)
 - *Prachana* in *Alpadosha* status.
 - In *Bahudosha*, *Siravedha* is advised.
 - *Jalauka* can be applied in children.
- **Shamana (Dosha pacifying medicines):** Ayurvedic formulations for Internal & External use can be selected from the list of medicines given in Table no: 9
- Rasayana chikitsa
- *Ayurvediya Swastha Vritta* is to be advised during and after treatment.

Preferable and Restricted Diet & Lifestyle: As mentioned in level 1

Follow Up: Once in every 15 days or as needed, for effective management of the condition.

Referral Criteria

- Same as mentioned earlier at level 1, plus,
- Nail/scalp involvement, kerion.
- No response to 4-6 weeks of treatment.
- Any other complications that threaten the life of the patient.
- Patients with weak immune system such as those suffering from HIV/AIDS

At Level 3: (Ayush hospitals attached with teaching Institution, District Level/ Integrated/ State Ayush Hospitals)

Clinical Diagnosis: Same as levels 1 and 2. Confirm diagnosis and severity with the help of investigations given below:

- Specimen culture
- Wood light examination
- Dermatophyte test medium
- Histopathology special stains

Management

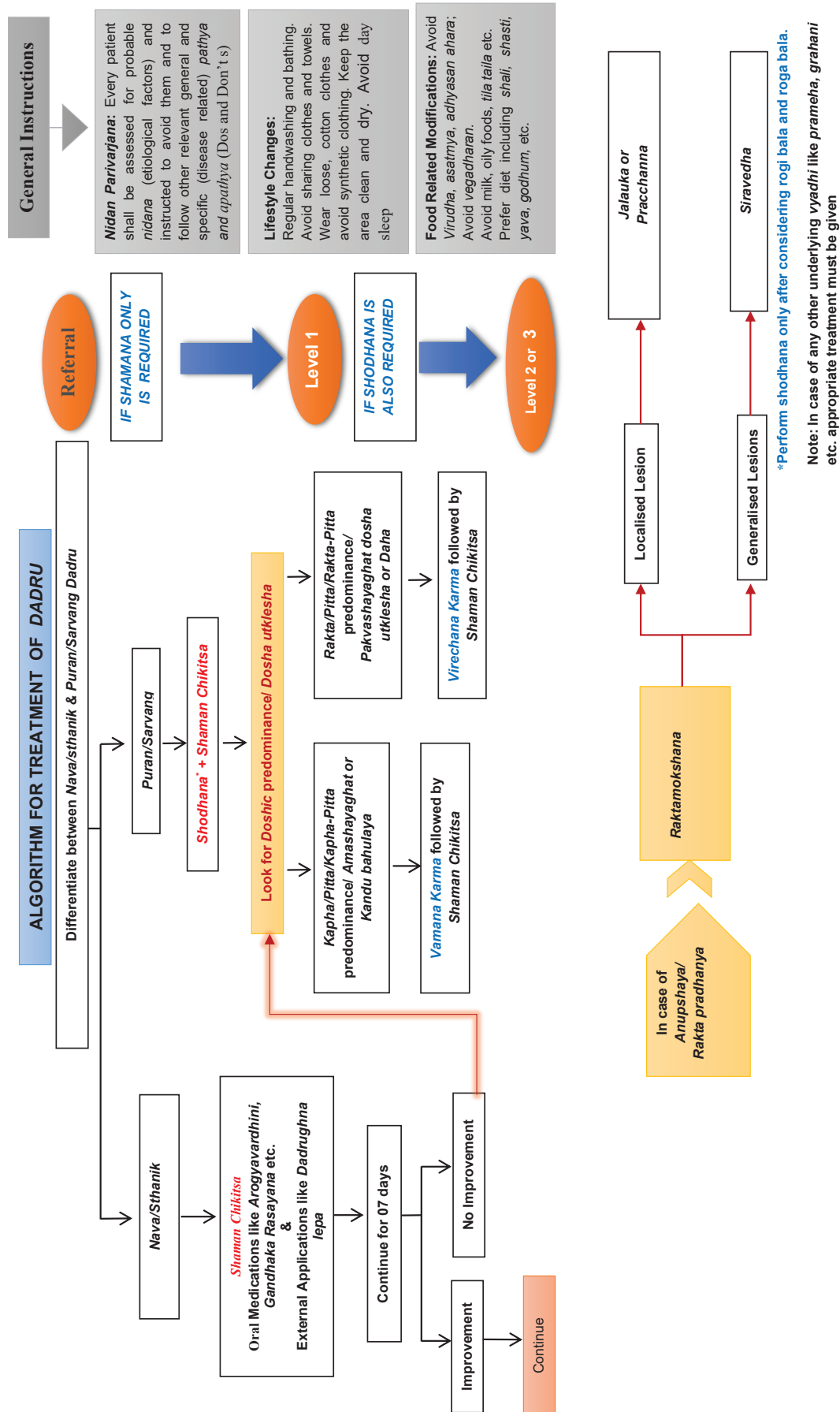
Purification or Other Procedures (As per applicability): As per level 2

Preferable and Restricted Diet & Lifestyle: As mentioned in Level 1

Follow Up: Once in every 15 days or as needed, for effective management of the condition.

Referral Criteria

- Same as mentioned earlier at Level 2
- Occurrence of acute and severe medical conditions requiring conventional intervention.



REFERENCES

1. Verma S, Heffernan MP. Superficial fungal infection: Dermatophytosis, onychomycosis, tinea nigra, piedra. In Wolff K, Goldsmith LA, Katz SI, Gilchrest BA, Paller AS, Leffell DJ, editors. Fitzpatrick's dermatology in general medicine. 7th ed. Mc Graw-Hill; 2008: p.1807-21.
2. Hay RJ. Dermatophytosis and other superficial mycoses. In: Mandell GL, Bennet JE, Dolin R, eds. Mandell, Douglas and Bennett's principles and practice of infectious diseases. 7th ed. Churchill Livingstone Elsevier; 2010: p. 3345-55.
3. National AYUSH Morbidity and Standardized Terminologies Electronic Portal (NAMASTE-P). NAMASTE Portal: Ministry of AYUSH, Government of India [Internet]. Available from: <https://namasteportal.nic.in/>
4. Noble SL, Forbes RC, Stamm PL. Diagnosis and management of common tinea infections. Am Fam Physician. 1998; 58: p.163-74, 177-8.
5. World Health Organisation. Epidemiology and management of common skin diseases in children in developing countries. Geneva: World Health Organization, 2005. WHO/FCH/CAH/05.12
6. Kumar K, Kindo AJ, Kalyani J, et al. Clinico-mycological profile of dermatophytic skin infection in a tertiary care centre. Sri Ramachandra Journal of Medicine 2007; 1: p. 12-5.
7. Khurana A, Sharath S, Sardana K, Chowdhary A. Clinico-mycological and therapeutic updates on cutaneous dermatophytic infections in the era of Trichophyton indotineae. J Am Acad Dermatol. 2024 Aug;91(2):315-323.
8. Sardana K, Gupta A, Mathachan SR. Immunopathogenesis of Dermatophytoses and Factors Leading to Recalcitrant Infections. Indian Dermatol Online J. 2021 May 12;12(3):389-399.
9. Sardana K, Khurana A. Overview of Causes and Treatment of Recalcitrant Dermatophytoses. In . IADVL Manual on Management of dermatophytoses. 1st edition 2018 CBS, Delhi. 80-104
10. Kumar S, Kumar P, Arava S, et al. Quality of life in patients with dermatophytosis: A cross-sectional study using the Dermatology Life Quality Index. Indian Dermatol Online J. 2020;11(5):716-20. DOI: 10.4103/idoj.IDOJ_418_197 Merz
11. Elewski BE. Tinea infections. In: Bologna JL, Schaffer JV, Cerroni L, editors. Dermatology. 4th ed. Philadelphia: Elsevier; 2018. p. 1011-25.
12. Shastri A, editor. Susruta Samhita. Nidana Sthana. 5:5. 4th ed. Varanasi: Chaukhambha Sanskrit Sansthan; 1976. p. 247.
13. Shastri K, Chaturvedi G, editors. Charaka Samhita. Chikitsa Sthana. 7:30. Reprint ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2012. p. 204.
14. Merz G, William, Hay J, Roderick. Topley and Wilson's Microbiology and Microbial Infections. 10th ed. Arnold Publishers; 2005: p. 223.
15. Longo DL, Kasper DL, Jameson JL, et al. Harrison's principles of internal medicine. 18th ed. New York: Mc Graw-Hill; 2012: p. 350
16. Lecerf P, Dangoisse C, Van Ooteghem A, et al. Asymptomatic scalp carriage among household contacts of children affected by tinea capitis: a prospective study in the metropolitan area of Brussels, Belgium. Skin Appendage Disord. 2022;8(3): 200-5. doi:10.1159/000520107.
17. E-Sushruta Samhita. Dalhana Nibandha Sangraha Commentary on Susruta Samhita, Nidana Sthana. 5:8. New Delhi: CCRAS, Ministry of AYUSH, Government of India. Available from: <https://niimh.nic.in/ebooks/esushruta/?mod=read>
18. E-Ashtang Hridaya Nidana Sthana. 14: 24 Institute of Ayurveda and Integrative Medicine (IAIM), FRLHT, Bangalore. Available from: <https://vedotpatti.in/samhita/Vag/ehrudayam/?mod=read>
19. E-Sushruta Samhita. Dalhana Nibandha Sangraha Commentary on Susruta Samhita, Nidana Sthana. 5:8. New Delhi: CCRAS, Ministry of AYUSH, Government of India. Available from: <https://niimh.nic.in/ebooks/esushruta/?mod=read>

20. Marks R.: *Roxburgh's common skin diseases*; 17th edition; New York: Oxford university press; P 39-40.
21. Sahoo AK, Mahajan R. Management of tinea corporis, tinea cruris, and tinea pedis: A comprehensive review. *Indian Dermatol Online J.* 2016 Mar-Apr;7(2):77-86. doi: 10.4103/2229-5178.178099. PMID: 27057486; PMCID: PMC4804599.
22. Karray M, McKinney WP. Tinea (Pityriasis) Versicolor. [Updated 2020 Feb 3]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK482500/>
23. Yee G, Syed HA, Al Aboud AM. Tinea Corporis. [Updated 2025 Feb 14]. In: Stat Pearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK544360/>.
24. Patricia M. In, Bailey & Scott's Diagnostic Microbiology. 13th ed. St. Louis, Missouri: Elsevier Publishers. 2014; chapter 60: p. 734.
25. Manson P, Cook GC, Zumla AI, et al. In Manson's tropical diseases. 22nd Ed. London: Elsevier publishers; Chapter 71; 2008; p. 1190
26. Finlay AY, Khan GK. Dermatology Life Quality Index (DLQI)—a simple practical measure for routine clinical use. *Clin Exp Dermatol.* 1994;19(3): 210–6.21
27. Anderson R, Rajagopalan R. Responsiveness of the Dermatology-specific Quality of Life (DSQL) instrument to treatment for acne vulgaris in a placebo-controlled clinical trial. *Qual Life Res.* 1998;7(8):723–34.
28. Mahdavi Nejad T, Mohammadi F, Gorgulu O, et al. Validation of the Persian version of Skindex-16 among older patients with skin diseases. *BMC Geriatr.* 2021; 21:724.
29. E-Charak Samhita. Charak Samhita Chikitsa Sthana. 7:31–32. New Delhi: CCRAS, Ministry of Ayush, Government of India. Available from: <https://niimh.nic.in/ebooks/ecaraka/?mod=read>
30. E-Charak Samhita. Charak Samhita Sutra Sthana. 28:11–14. New Delhi: CCRAS, Ministry of Ayush, Government of India. Available from: <https://niimh.nic.in/ebooks/ecaraka/?mod=readwrite>
31. Ayurvedic Formulary of India (e AFI). Part I: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via “e Ayu: Formulary of India” (online repository). p. 170–171.
32. Ayurvedic Formulary of India (e AFI). Part I: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via “e Ayu: Formulary of India” (online repository). p. 189–191.
33. Pandey J, editor. Harit Samhita. 1st ed. Varanasi: Chaukhambha Vishvabharati; 2010. p. 435
34. Ayurvedic Formulary of India (e AFI). Part I: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via “e Ayu: Formulary of India” (online repository) p.184-185
35. Ministry of Ayush. National List of Essential Ayush Medicine. Available from: [https://upayushsociety.com/doc/GO/New%20EDL%20\(NLEAM\)-%20A+H+U.pdf](https://upayushsociety.com/doc/GO/New%20EDL%20(NLEAM)-%20A+H+U.pdf)
36. Government of India. The Ayurvedic Pharmacopoeia of India. 1st English ed. Part 2. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2000. P.81-83
37. Ministry of Ayush. National List of Essential Ayush Medicine. Available from: [https://upayushsociety.com/doc/GO/New%20EDL%20\(NLEAM\)-%20A+H+U.pdf](https://upayushsociety.com/doc/GO/New%20EDL%20(NLEAM)-%20A+H+U.pdf)
38. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part.2. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.89-90.

39. Ayurvedic Formulary of India (e AFI). Part I: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via "e Ayu: Formulary of India" (online repository) p.323-324.
40. Ministry of Ayush. National List of Essential Ayush Medicine. Available from:
[https://upayushsociety.com/doc/GO/New%20EDL%20\(NLEAM\)-%20A+H+U.pdf](https://upayushsociety.com/doc/GO/New%20EDL%20(NLEAM)-%20A+H+U.pdf)
41. Ayurvedic Formulary of India (e AFI). Part I: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via "e Ayu: Formulary of India" (online repository) p.61-62
42. Ayurvedic Formulary of India, Part II.Vol II Ed. 1st, Govt. of India, Ministry of Health Family Welfare, Department of I.S.M. & H., New Delhi, 2010.p. 63
43. Ministry of Ayush. National List of Essential Ayush Medicine. Available from:
[https://upayushsociety.com/doc/GO/New%20EDL%20\(NLEAM\)-%20A+H+U.pdf](https://upayushsociety.com/doc/GO/New%20EDL%20(NLEAM)-%20A+H+U.pdf)
44. Bhavmishra. Bhavaprakash Samhita. Vol. 2, Chikitsa Sthana. Edited by: Mishra BS. Varanasi: Chaukhambha Sanskrit Bhavan Prakashan; Reprint 2018. p. 538-540.
45. Bhavmisra. Bhavaprakasa. Vol. 2.:Sitaram B, editor. Varanasi: Chaukhambha Orientalia;First Edition;2010. p. 351
46. Ayurvedic Formulary of India (e AFI). Part I: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via "e Ayu: Formulary of India" (online repository) p.207-209.
47. Ayurvedic Formulary of India (e AFI). Part I: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via "e Ayu: Formulary of India" (online repository) p.270-272
48. Ayurvedic Formulary of India (e AFI). Part I, Part a: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via "e Ayu: Formulary of India" (online repository) p.270-272
49. Pandey J, editor.Harit Samhita. 1st ed. Varanasi: Chaukhambha Vishvabharati; 2010. p. 436.
50. Government of India. The Ayurvedic Pharmacopoeia of India. Part 2. Vol. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2008. p.117
51. Ayurvedic Formulary of India (e AFI). Part I: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via "e Ayu: Formulary of India" (online repository) p.664-665
52. Ayurvedic Formulary of India (e AFI). Part I: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via "e Ayu: Formulary of India" (online repository) p.705
53. E-Charak Samhita. Charak Samhita Chikitsasthan. 7:126. New Delhi: CCRAS, Ministry of Ayush, Government of India. Available from: <https://niimh.nic.in/ebooks/ecaraka/?mod=read>
54. Bhavmishra. Bhavaprakash Samhita. Vol. 2, Chikitsa Sthana. Edited by: Mishra BS. Varanasi: Chaukhambha Sanskrit Bhavan Prakashan; Reprint 2018. p. 541.
55. Ayurvedic Formulary of India (e AFI). Part I, Part a: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via "e Ayu: Formulary of India" (online repository) p.400-401
56. Ayurvedic Formulary of India (e AFI). Part I: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via "e Ayu: Formulary of India" (online repository) p.391-392
57. Ayurvedic Formulary of India (e AFI). Part I: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via "e Ayu: Formulary of India" (online repository) p.453-454

58. Rasatarangini, Sadananda sharma, edited by pt. Kashinath Shastry, 11th edition, 1989, published by Motilal Banarasidas, Varanasi.
59. Ayurvedic Formulary of India (e AFI). Part II: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via “e Ayu: Formulary of India” (online repository) p.131
60. Sena V. Pathyapathya Vinischaya. In: Kishore P, Padi MM, editors. New Delhi: Central Council for Research in Ayurveda & Siddha; 1999. p. 82–3.
61. Babu DR, Padhi MM, editors. Handbook of Anupana, Pathya and Apathya. New Delhi: National Institute of medical heritage, Central Council for Research in Ayurvedic Sciences; 2012. p. 130.

(मण्डलकुष्ठः)

PSORIASIS

ICD 10 code: L40

ICD 11 code: EA90

ICD11 TM 2 code : SN4A

National Ayurveda Morbidity Code

ED-4 कुष्ठम्

ED-4.2.4 मण्डलकुष्ठः/कफजकुष्ठः

ED-4.3.1 एककुष्ठः

ED-4.2.7 सिध्मः

ED-4.3.4 विपादिका

ED-4.2.6 पुण्डरीकः

ED-4.2.3 उदुम्बर-कुष्ठः/पैत्तिक-कुष्ठः

CASE DEFINITION ^{1, 2}

Psoriasis is a common, chronic, inflammatory and proliferative condition of the skin and may be associated with systemic manifestations in many organ systems. The most characteristic lesions are red, scaly, sharply demarcated, indurated plaques, particularly over the extensor surfaces and scalp. It can cause itching, irritation, burning and stinging, and the extent and severity vary enormously over time and between individuals.

Table 01: Ayurveda Disease definition:

ED-4	कुष्ठम्	Integumentary Disease
ED-4.2.4	मण्डलकुष्ठः/कफजकुष्ठः	the disorder is characterized by स्निग्धः [smooth/unctuous/oily], गुरु [heaviness], उत्सेधः [raised], क्षक्ष्णपर्यन्तः [glossy margins], स्थिरपर्यन्तः [hard margins], पीतपर्यन्तः [yellowish margins], शुक्लावभासी [whitish appearance], रक्तावभासी [reddish appearance], शुक्लरोमराजीसन्ततः [covered with whitish hairs], बहुस्रावः [excessive/copious discharge], बहलस्रावः [profuse discharge], पिच्छिलस्रावः [slimy discharge], बहुक्लेदः [excessive moistness/soddening], बहुकण्डू [excessive itching], बहुकृमिः [excess worms], सक्तगतिः [slow spread], सक्तसमुत्थानः [slow onset], सक्तभेदी [slow onset of complications]
ED-4.3.1	एककुष्ठः	the disorder is characterized by अस्वेदनम् [anhidrosis/ lack of sweating], महावस्तु/ महाश्रयम् [broad based], मत्स्यशकलोपमम् [looks like the scales of a fish]
ED-4.2.7	सिध्मः	the disorder is characterized by अलाबुपुष्पसङ्काशम् [resembling flowers of a gourd – white in colour], परुषः [rough/dry], अरुणः [reddish in color], विशीर्ण [broken, shattered], बहिस्तनूनि [thin outside], अन्तःस्निग्धानि [unctuous inside], शुक्लरक्तावभासः [whitish and reddish tinge], बहूनि [numerous], अल्पवेदना [mild pain], अल्पकण्डू [less itching], अल्पदाहः [less burning]

ED-4	कुष्ठम्	Integumentary Disease
		sensation], अल्पपूयः [less pus discharge], अल्पलसीका [less watery discharge], लघुसमुत्थानः [light onset], अल्पभेदः [less complications], अल्पकृमि [less worms], घृष्टंरजःकिरेत् [dust on itching], दौग्धिकपुष्पवत् [resembles दौग्धिकflower], प्रायेणऊर्ध्वकायेस्यात् [usually affects upper part of the body]
ED-4.3.4	विपादिका	the disorder is characterized by पाणिस्फुटनम् [cracks in the hands], पादस्फुटनम् [cracks in the feet], तीव्रवेदनम्/ तीव्रार्तिः [severe pain], मन्दकण्डू [less itching], रागः [redness/ congestion], पिटकाचितः [associated with eruptions]
ED-4.2.6	पुण्डरीकः	the disorder is characterized by पुण्डरीकसङ्काशः/ पुण्डरीकपत्रप्रकाशः [like the petals of a पुण्डरीक (lotus)], पलाशसङ्काशः [resembling पलाशflower], शुक्लावभासः [whitish appearance], रक्तावभासः [reddish appearance], रक्तपर्यन्तः [reddish margins], रक्तराजीसन्ततः [full of red streaks], रक्तसिरासन्ततः [associated with reddish veins], उत्सेधवन्ति [raised], बहुपूयः [excessive pus discharge], बहुरक्तः [excess bloody discharge], बहुलसीका [excessive watery discharge], बहलपूयः [thick pus discharge], बहलरक्तः [thick bloody discharge], बहलसीका [thick watery discharge], कण्डूः [itching], कृमिः [worms], दाहः [burning sensation], पाकः [inflammation/ suppuration], आशुगतिः [rapid spread], आशुसमुत्थानः [rapid onset], आशुभेदिः [sudden onset of complications]
ED-4.2.3	उदुम्बर-कुष्ठः/ पैत्तिक-कुष्ठः	the disorder is characterized by ताम्रः [copper coloured], ताम्रनखः [copper coloured nails], ताम्रोमराजीभिरनवद्धः [covered with copper coloured hairs], बहलानि [copious discharges], बहुपूयः [excessive pus discharge], बहुरक्तः [excessive bloody discharge], बहुलसीका [excessive watery discharge], बहलपूयः [thick pus discharge], बहलरक्तः [thick bloody discharge], बहलसीका [thick watery discharge], कण्डूः [itching], क्लेदः [moistening /soddening], कोथः [wheal like skin eruptions], दाहः [burning sensation], पाकः [inflammation/ suppuration], आशुगतिः [rapid spread], आशुसमुत्थानः [rapid onset], आशुभेदिः [sudden onset of complications], ससंतापः [associated with heat], सकृमिः [associated with worms], पक्वौदुम्बरफलवर्णः/उदुम्बरफलाभासम् [resembling the ripe fruit of उदुम्बरः], गौरसिराचितम् [with whitish veins], रुजाकरम् [painful], आशुअवदरणम् [sudden onset of cracking], रागम् [redness/ congestion], लोमपिञ्जरम् [tawny brownish coloured hairs]

INTRODUCTION (incidence/ prevalence, morbidity/mortality/ risk factors) ^{1, 3-9]}

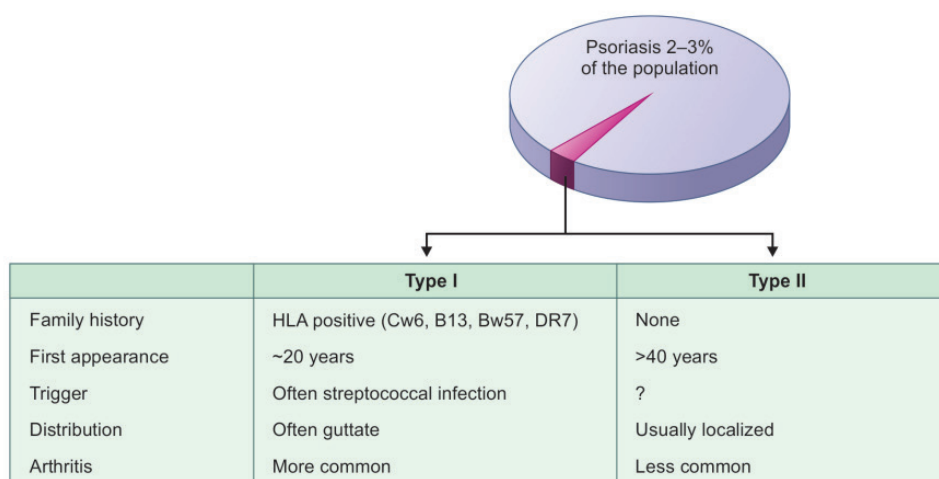
- Psoriasis vulgaris is a chronic, non-communicable, disfiguring, and disabling disease with negative impact of varied degree on a patient's quality of life (QoL).
- It affects males and females equally. About 2–3% of the population have psoriasis and 10% of these individuals will develop psoriatic arthritis. Of this group, in 3–5% of them, it is severe ⁵

- According to the World Health Organization, approximately 0.09% - 11.43% (incidence, 46,22,594, prevalence 4,08,05,386) of the global population suffers from psoriasis.
- In India, the prevalence of this illness varies from 0.44 to 2.8%; both sexes affected equally with few studies showing male predominance and most of the patients are in their third or fourth decade at the time of presentation.
- The lifetime risk of developing the disease is strongly associated with a family history; if no parent has psoriasis, the risk is 4%; if one parent has psoriasis, the risk is 14-28% and if both parents have psoriasis, the risk is 40-65%.

PATHOGENESIS AND ITS THERAPUETIC IMPLICTIONS⁵

1. Genetics:

There are two peaks of onset of psoriasis (Fig.). Type I has onset in the second and third decades and a more common family history of psoriasis. Type II has onset in late adulthood in patients without obvious family history.



2. Hyperproliferation

The growth fraction of the upper layer of skin known as the epidermis is increased with the basal cell being increased 7x compared with normal skin. The cell turnover time decreases from 30 to 5 days, similarly the cell cycle time reduces from 311 to 36 hours.

3. Inflammation

Psoriasis is now known to be a autoimmune disorder with CD4T cells, Th17 and Th 12 cells playing an important role.⁸ Notably these cells are determined by cytokines that are the target of novel drugs known as biologic which have changed the therapeutic of psoriasis.⁹ [fig] Psoriatic keratinocytes contain high levels of antimicrobial peptides which may account for the surprisingly low incidence of bacterial skin infection.

4. Psoriasis is also now appreciated to be an intimate part of the metabolic syndrome, associated with hypertension, diabetes mellitus, and coronary artery disease.

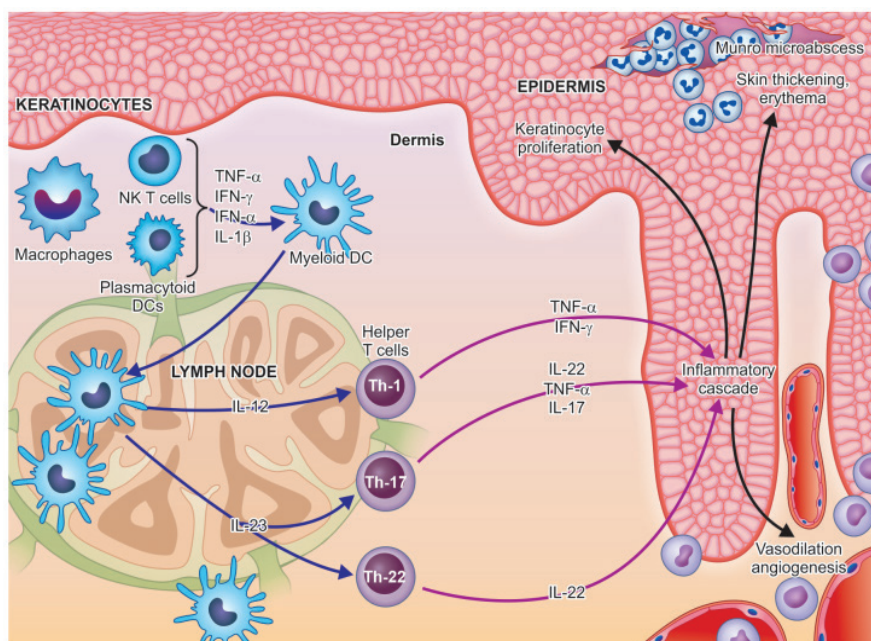


Fig - A depiction of the major T cell subtypes and cytokines that determine Psoriasis. Drugs that inhibit these cytokines are available and are known as Biologics

In Ayurveda, psoriasis corresponds broadly to *Kustha*, a term for chronic skin diseases caused by *dosha-dhatu-mala* imbalances and systemic disturbances ^[10]. Psoriasis aligns with subtypes such as *EkaKustha*, *Kitibha*, *Sidhma*, *Vipadika*, *Mandala*, *pundarika* and *Carmadala*, involving predominance of *Vata-Kapha* in plaque types, *Pitta-Kapha* in pustular forms, and *Vata-Pitta* in psoriatic arthritis ^[11]. The pathogenesis (*Samprapti*) includes dietary and lifestyle factors causing impaired digestion (*Agni*), accumulation of toxins (*Ama*), and obstruction of channels (*Srotorodha*), paralleling immune dysregulation and systemic inflammation ^[12].

Ayurveda also recognizes the systemic nature of psoriasis through its holistic view of *Kustha*, linking it to chronic metabolic and psychological imbalances. Comorbidities like cardiovascular disorders, metabolic syndrome, and depression are conceptualized as manifestations of *Dushivisha* (chronic toxins), *Mandagni* (impaired digestive fire), and *Avarana Vata* (obstruction in channels), emphasizing the need for comprehensive management addressing physical and mental health ^[13,14]. This integrated understanding supports the use of *Shodhana* (detoxification), *Shamana* (palliative treatment), *Rasayana* (rejuvenation), and *Satvavajaya* (psychological therapies) to address both cutaneous lesions and systemic complications effectively ^[15].

Table 02: Ayurvedic Correlates of different types of Psoriasis and their Features

Clinical Variant	Clinical Presentation	Ayurvedic Correlates	Ayurvedic Diagnostic Type	Key Ayurvedic Features
Plaque Psoriasis	Sharply demarcated red to salmon-pink plaques with silvery-white scales; symmetrical; common on elbows, knees, scalp, sacrum	Dry, rough texture; dark color; fish-scale-like scales	<i>Charma Kustha</i> , <i>EkaKustha</i> , <i>Kitibha</i>	<i>Vata-Kapha</i> dominance; rough (<i>hasticharmavat</i>), dry skin

Clinical Variant	Clinical Presentation	Ayurvedic Correlates	Ayurvedic Diagnostic Type	Key Ayurvedic Features
Guttate Psoriasis	Acute onset, numerous small drop-like papules (1–10 mm) mainly on trunk and limbs; often post-strep infection	Petal-like lesions; toxin-induced origin	<i>Padmapatra Kustha, Visha Janya</i>	Sudden eruption, toxin (<i>visha</i>) or infection cause
Flexural Psoriasis	Smooth, erythematous patches with minimal scaling in skin folds (axillae, groin, inframammary)	Smooth, confluent, slightly raised lesions	<i>Parimandala / Mandala Kustha</i>	<i>Pitta-Kapha</i> predominance; moist, soft patches
Pustular Psoriasis	Generalized sterile pustules on erythematous base; systemic symptoms (fever, malaise)	Thick pus, burning sensation	<i>Pundarika, Visarpa</i>	<i>Pitta-Kapha</i> vitiation; thick pus accumulation
Palmoplantar Pustulosis	Painful pustules localized to palms and soles	Painful, pustular eruptions	<i>Vipadika</i>	<i>Kshudra Kustha</i> ; severe local discomfort
Erythrodermic Psoriasis	Extensive redness and scaling (>75–90% BSA); systemic symptoms (fever, chills)	Severe inflammation with systemic signs	<i>Carmadalam, Oudumbara, Visarpa</i>	Intense <i>Pitta-Kapha</i> disturbance; widespread skin involvement
Nail Psoriasis	Nail pitting, oil spots, subungual hyperkeratosis, onycholysis	Nail deformities due to Vata aggravation	<i>Kunakha</i>	<i>Vatadosha</i> involvement causing nail changes
Scalp Psoriasis & Sebopsoriasis	Flaky, greasy scales on scalp, hairline, nasolabial folds; may cause hair loss	<i>Kapha-Pitta</i> dominant; greasy scaling	<i>Darunaka and Arumshaka</i>	Thick greasy scales resembling feathers (<i>viluna pakshavat</i>)
Psoriatic Arthritis	Joint pain, stiffness, swelling; dactylitis; DIP and spine involvement	<i>Vata</i> and <i>rakta</i> vitiation affecting bone and joint tissues	<i>Vatasonitha Poorvarupa</i>	<i>Vata</i> dominance; affects <i>rakta</i> , <i>asthi</i> (bone) and <i>sandhi</i> (joints)

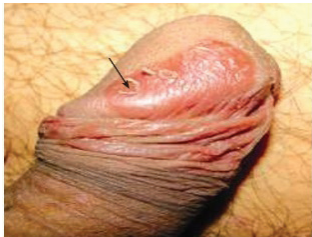
CLINICAL PRESENTATION: 1, 16-21

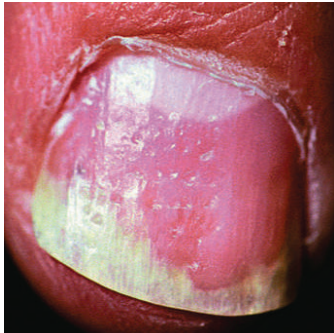
Psoriasis has several clinical variants that differ in severity, location, longevity, shape, cause and pattern. The course of the disease is marked by exacerbations and remissions usually get worse in winters. Patients may experience more than one type of Psoriasis at the same time. The different types of psoriasis are fairly distinct and are listed below.

Table 03: Clinical Presentation of Psoriasis

Types of Psoriasis	Description	Figure
Clinical forms of psoriasis (based on morphology or natural history)		
Plaque Psoriasis	- The most common form of Psoriasis. - The most common sites are the scalp, trunk, buttocks and - extensor surfaces of the limbs. - It presents as well-defined, with silvery white scales varying in size from 1cm to several centimetres. - In the active phase of disease, the skin lesions develop along the lines of scratch or sites of trauma (Koebner's phenomenon)	
Guttate psoriasis	- Sudden onset of a shower of small lesions from 2 or 3mm to 1cm in diameter, round or slightly oval, appearing diffusely over the body. - Most commonly seen in children and young adults, it frequently follows several weeks after pharyngitis caused by group A beta-hemolytic streptococci	
Unstable psoriasis (Active psoriasis, eruptive inflammatory psoriasis)	- There is marked activity in the form of enlargement of plaques and an increase in erythematous areas and development of many new, smaller plaques with complaints of severe pain or pruritus. - The precipitating factors are systemic or potent topical corticosteroid withdrawal	
Erythrodermic psoriasis	- It is uncommon only in 1-2 % of patients are affected involving more than 90% of body surface area by psoriasis lesions with febrile, dependent oedema, severe itching, and redness with varying degrees of scales. - Environmental or therapeutic triggers, including systemic illness, alcoholism, antimalarials, irritating topical treatments, UV radiation or withdrawal of systemic corticosteroids, cyclosporine, often precipitate the acute form.	

Types of Psoriasis	Description	Figure
Pustular psoriasis	- The acute generalized pustular psoriasis (von Zumbusch) presented with recurrent episodes of fever with general malaise, multiple isolated sterile pustules, laboratory abnormalities (leucocytosis, elevated ESR or C-reactive protein, confirmed by Kogoj's spongiform pustules on histopathology). - Palmoplantar pustulosis presents one or more well-defined plaques symmetrically on palms and soles, with dusky red, scaly and fissured. Numerous pustules are present within plaques, usually 2-5 mm in diameter	
Atypical forms of psoriasis¹⁴	- Rupioid psoriasis is presented as limpet-like, cone-shaped lesions. - Elephantine psoriasis has unusual presentations, such as persistent, thick scaling, large plaques on the back, limbs, hips, or elsewhere. - Ostraceous psoriasis is a ring-like hyperkeratotic lesion with a concave surface resembling an oyster shell.	
Other specified forms of psoriasis (based on age or precipitants)		
Linear and segmental psoriasis	The linear or segmented psoriasis lesions are unilateral or Blaschko linear, and an extremely unusual presentation is seen at a young age.	
Psoriasis in childhood and old age	- It is common in children with a cumulative prevalence of up to 18 years, mostly associated with obesity and diabetes. - Under the age of 2 years, Napkin psoriasis is the most common presentation, characterised by well-defined erythema devoid of scales. - In old age groups after the age of 65 years, plaque psoriasis is commonly seen on the scalp.	
Drug-induced or exacerbated Psoriasis	Drugs such as commonly beta blockers, lithium, synthetic antimalarials, non-steroidal anti-inflammatory drugs (NSAIDS), Tetracycline, less commonly ACE inhibitors, interferon and antifungals may induce or exacerbate the psoriasis.	

Types of Psoriasis	Description	Figure
Photo-aggravated psoriasis	Especially in women, exposure to sunlight may exacerbate psoriasis in sun-exposed areas.	
HIV- induced or exacerbated psoriasis	- Psoriasis may be the first presentation of HIV infection, as may the deterioration in a previously stable disease. Furthermore, there is a strong association between severe psoriasis, psoriatic arthropathy and HIV infection. - The most common variety is the Plaque psoriasis; sebopsoriasis, rupiod psoriasis and erythrodermic psoriasis are less common.	
Psoriasis affecting specific sites		
Scalp psoriasis	- The commonest area affected by plaque psoriasis is often the site first affected, and multiple discrete plaques of varying sizes diffusely involve the whole scalp. - Presented as dandruff-like flaking and silvery-white scale, with severe itching leading to burning sensation or soreness and bleeding.	
Sebopsoriasis¹⁵	Plaques of thin, sharply demarcated erythema with variable scales may occur in the typical areas of seborrhoea, like paranasal areas, external ears, medial eyebrows, hairline, preternal, and interscapular chest wall.	
Flexural psoriasis (Inverse psoriasis)	- Flexor psoriasis is often seen in individuals with plaque psoriasis elsewhere on the skin - Most common sites- axilla, submammary folds, umbilicus, inguinal creases, and other body folds- are commonly seen in older adults and are associated with obesity	
Genital psoriasis	- In males, the most commonly seen in the glans penis, followed by scrotal skin and penile shaft, associated with inverse or plaque psoriasis. - In females, most commonly seen vulval involvement presented with symmetrical, erythematous, non-scaly, well-demarcated thin plaques affecting the labia majora with severe itching.	

Types of Psoriasis	Description	Figure
Nail psoriasis (psoriatic onychodystrophy)	- Nail dystrophy may be seen in all types of psoriasis or occasionally as an isolated feature presented in 40 % of cases at any time, and the lifetime prevalence is significantly higher. - Nail changes includes pitting, separation of nail plate from nail bed appearing as yellowish discolored nails (onycholysis) and thickened, irregular, brownish nails (onychodystrophy)	
Mucosal lesions	Mucosal involvement is infrequent but presents as a geographical tongue (benign migratory glossitis) and fissured tongue.	
Non-pustular palmoplantar psoriasis	Commonly seen on palms and soles, presented as typical scaly patches with fine silvery scales, can be evoked on scratching. However, on the wrist, forearm or palm, there is a clear edge without vesiculation	
Ocular lesions	- Psoriasis may affect ocular structure directly or indirectly and is associated with immunological phenomena. - Directly affected by blepharitis, chronic nonspecific conjunctivitis, xerosis, and rarely keratitis. - Immunologically affected uveitis is associated with extensive psoriasis and psoriatic arthritis.	
Extra-Cutaneous Manifestations		
Psoriatic arthritis	- There can be involvement of joints of hands and feet especially distal interphalangeal joints. - In some cases, spondylitis or sacro-iliitis can also be seen. The arthritis can be deforming at times.	

CLINICAL EXAMINATION²¹

Psoriasis is mostly diagnosed on the basis of clinical examination of the skin, scalp, and nails along with review of patients' smoking history, medical history and family history. The characteristic skin lesions are sharply demarcated, scaly, erythematous raised plaques, either painful or itching red patches covered with silvery scales. The lesions vary in shape and may be ovoid, round, or irregular and are often symmetrically distributed. Common areas of involvement include extensor surface of body, elbows, knees, scalp, trunk, lumbosacral region and nails. A skin biopsy is needed in some cases to confirm the diagnosis and to rule out other diseases.

Ayurveda clinical examination comprises of *darshana*, *sparshana* and *prashna pareeksha* which provides leads to *dosha* predominance of clinical manifestation of psoriasis.

Dashavidha Pareeksha (Tenfold examination) are also included in Ayurveda clinical examination to formulate adequate treatment protocol.

DIFFERENTIAL DIAGNOSIS^{1, 21-25}

Table 04: Differential diagnosis of Psoriasis

Psoriasis Subtype	Differential Diagnosis	Characteristic and Diagnostic Features
Plaque psoriasis		Well-defined, sharply demarcated, erythematous plaques with a thin, silvery-white scale; tend to be symmetrically distributed over the body. There is predilection for extensor surfaces of the body like elbows, knees, scalp, back, buttocks, etc.
	Eczema	Erythematous papules/plaques lacking a silvery scale; can be vesicular or weeping; chronic lesions can be lichenified/hyperkeratotic. Predilection for flexural surfaces; more pruritic than psoriasis; does not koebnerize; personal or family history of asthma, hay fever, allergies.
	Dermatophyte infection	Solitary/many erythematous lesions with central clearing and peripheral scale; Potassium hydroxide preparation, fungal culture, and rarely, skin biopsy confirm diagnosis.
	Subacute cutaneous lupus erythematosus	Photo-distributed psoriasiform lesions. Skin biopsy and laboratory tests confirm the diagnosis.
	Lichen planus	Typically, pruritic, violaceous papules with frequent mucosal involvement.
	Atopic dermatitis	Three distinct patterns of AD, depending on the age of the patient. Intensely itchy, lichenified plaques.
Guttate psoriasis		Small "droplet" lesions of short duration (weeks to months); palms and soles spared. Occurs in <2% of patients with psoriasis, usually affects those aged younger than 30 years; may have an antecedent upper respiratory infection

Psoriasis Subtype	Differential Diagnosis	Characteristic and Diagnostic Features
	Secondary syphilis	Generalized erythematous psoriasiform papules with collarette scale; palms and soles affected; associated with nonscarring alopecia, lymphadenopathy, systemic symptoms (malaise, fever, headache, myalgias). Chancre may still be evident in early stages of secondary syphilis; rapid plasma reagin confirms diagnosis.
	Pityriasis rosea	1–2 weeks after a vague “viral” episode. A single patch appears on the trunk, followed by smaller lesions along skin cleavage lines. Usually self-limiting and does not usually recur; associated with Herpesvirus 6; epidemics occur in spring and fall.
Erythrodermic psoriasis		Severely disabling Diffuse erythema >75% body surface area with or without exfoliation; superficial desquamation, hair loss, nail dystrophy.
	Pityriasis rubra pilaris	Orange-red plaques start on the head and spread caudally; small areas of spared skin is frequently present; yellowish thickening of palms and soles; nail changes similar to psoriasis. Skin biopsy confirms diagnosis
	Drug eruptions	Generalized erythroderma develops approximately 7–10 days after the initiation of a new drug. Skin biopsy confirms diagnosis; eosinophilia is suggestive of a drug eruption.
Pustular psoriasis		Individual/coalescing sterile pustules that occur either in an acute, generalized fashion or are localized to palms and soles. Usually affects aged >65 y; >25% of patients have a positive family history.
	Irritant dermatitis	Irritant dermatitis is most frequently caused by occupational exposure, either as an industrial contact or as a household contact. Clinical features, ranging from a little dryness, redness or chapping to various types of eczematous dermatitis to an acute caustic burn.
	Folliculitis	Dome-shaped follicular pustules. Pseudofolliculitis seen in the beard area (after shaving), thighs, and arms (after epilation by waxing).
	Allergic contact dermatitis	Develops due to involvement of immunological pathway, being a type IV (delayed hypersensitivity) reaction to exogenous contact antigens. Progresses from erythema to edema to papulovesiculation.
Inverse psoriasis		Well-demarcated, erythematous lesions with minimal scaling. Affects intertriginous Areas.
	Intertrigo	Moist, erythematous lesions of intertriginous areas, caused by mechanical factors or secondary infection; difficult to distinguish from inverse psoriasis

Psoriasis Subtype	Differential Diagnosis	Characteristic and Diagnostic Features
	Cutaneous T-cell lymphoma	Erythematous patches/plaques of intertriginous areas. Skin biopsy of the thickest, untreated. A lesion with minimal sun exposure confirms the diagnosis
	Tinea cruris (Jock itch)	Caused by dermatophytes, presented with severe itching, red, well-defined scales and cracked rash in groin folds, inner thigh and rarely around the anus, less often with musty or yeasty odour from the area. The KoH test and culture will confirm the diagnosis.
	Tinea corporis	Annular/arcuate lesions with relative clearing in the center and an active periphery. Infection of the glabrous skin anywhere on the body, except palms, soles, and groins.
	Candidiasis	Resembles like psoriasis with glistening deep red colour lesions, particularly in flexor areas, but scaling tends to be confined to the edge, and small satellite pustules and papules are usually evident outside the main area. The culture test will confirm the diagnosis.
	Seborrheic dermatitis	The lesions are lighter in colour, less well-defined and covered with a dull or branny scale. The most common sites are on the scalp, lateral sides of eyebrows, ear, nasolabial folds, and the upper part of the chest and back.
	Nummular dermatitis	History: of atopic diathesis, Morphology: discoid plaques, Common site: acral parts.

Table 05: Ayurvedic Differential Diagnosis

Disease	Dosha	Key Features (Lakshana)	Differentiation from Psoriasis
<i>Charmadala</i>	<i>Pitta-Kapha</i>	Intense itching, erythema, oozing vesicles, moist lesions	The lesions in psoriasis are dry with thick scaling and less exudation.
<i>Dadru</i>	<i>Kapha-Pitta</i>	Circular lesions with elevated margins, redness, intense itching	The lesions in psoriasis lacks annular pattern and central clearing.
<i>Pama</i>	<i>Kapha-Pitta</i>	Severe itching, papular lesions, nocturnal aggravation	Psoriasis plaques are non-infective, with silvery scaling
<i>Sidhma</i> <i>Kitibha Eka Kustha</i>	As mentioned in table no. 02		

SUPPORTIVE INVESTIGATIONS ¹

- Diagnosing psoriasis is typically based on clinical presentation
- A skin biopsy will be helpful in atypical cases.
- In generalized pustular psoriasis, high sensitivity C-reactive protein may be mildly elevated, but higher levels are seen in psoriatic arthritis.

- Blood tests like CBC (Complete Blood Count), KFT (Kidney Function Test), LFT (Liver Function Test), HLA B27 (Human Leukocyte Antigen B27), Uric acid levels, Human Immunodeficiency Virus, Rheumatoid factor, X-ray and Antinuclear antibodies, tests for specific infections like streptococcal and staphylococcal antibodies can help differentiate psoriasis from other conditions with similar symptoms.
- KOH preparation should be done to rule out fungal infection (Tinea etc) in cases of psoriasis of hands, feet, and nails.

Tests for diagnosis ^[23, 24]

Table 06:

TEST	DESCRIPTION
1) Bedside tests	Two simple bedside tests were done to confirm the diagnosis.
a) Grattage test	This is positive when scales are accentuated by grating lesions with a glass slide.
b) Auspitz sign	When gently scraping off all the scales from lesions with a glass slide, a glistening white adherent membrane (Berkley's membrane) appears. Once this membrane is removed, punctate bleeding points become visible. (positive Auspitz sign).
2) Skin biopsy	Skin biopsy (done in doubtful cases) shows epidermis and dermal changes. Epidermal changes include parakeratosis, absent granular layer, regular acanthosis, suprapapillary thinning, elongation of rete ridges and collection of neutrophils in the epidermis (spongiform pustule of Kogoj and Munro's microabscess). Dermal changes: dilatation and tortuosity of capillary loops in dermal papillae, and lymphocyte infiltrates in the upper dermis.

Ayurveda Diagnosis:

Lakshana:

- Lesions with *Khara sparsa* (Plaque like lesion)
- Lesion with *Rajah kiret* (Fine powdery scales), *Matsyashakala sannibha*, (Silvery Scales)
- *Mandala* (chronic Patch like lesion)
- Presence of *lakshanas like Kandu / Daha / Ruja*
- Location of lesions
- *Nakha dushti* (Psoriatic nail changes)
- Presence of Arthritis (*vatasonitham*)
- *Nimitta alpe api kopanam* – Kobners phenomenon
- Chronic lesions – *Chirasthithi*

Dosha assessment:

Table 07:

Key Ayurvedic Features	Kustha Correlate	Dominant Dosha(s)
Dry, rough, (<i>Khina khara sparsham</i>)	<i>Kitibha</i>	Vata-Kapha
Fish-scale-like lesions (<i>Matsya shakala sannibham</i>)	<i>EkaKustha</i>	

Key Ayurvedic Features	Kustha Correlate	Dominant Dosha(s)
Rough Dark color (<i>Hasticharma khara sparsham</i>)	<i>Charma Kustha</i>	
Dew drop appearance (<i>Padmapatra eva amsubhi</i>) sudden onset; toxin/infection-related	<i>Pundarika</i>	<i>Kapha-pitta</i>
Smooth, moist, circular Patch like lesion lesions; confluent pattern	<i>Parimandala/ Mandala Kustha</i>	<i>Pitta-Kapha</i>
Thick, hot pustules; burning sensation	<i>Pundarika, Visarpa</i>	
Painful pustular eruptions with severe itching in palms and soles	<i>Vipadika</i>	<i>Vata-Kapha</i>
Severe redness, swelling, systemic symptoms	<i>Carmadalam, Oudumbara, Visarpa</i> (severe forms)	<i>Pitta-Kapha</i> (intensely aggravated)
Nail pitting, onycholysis, nail deformities	<i>Kunakha</i>	<i>Vata</i>
Greasy, thick, feather-like scaling	<i>Sidhma Kustha</i>	<i>Kapha-Pitta</i>
Joint involvement; bone pain; pre-arthritis phase	<i>Vatasonitha Poorvarupa</i>	<i>Vata</i> (affecting <i>Asthi & Sandhi</i>)

Classification of severity and prognostic assessment

- **Psoriasis area severity index (PASI) score** ^[26]

The PASI is a widely used instrument in psoriasis trials that assesses and grades the severity of psoriatic lesions and the patient's response to treatment. It produces a numeric score ranging from 0 to 72. A 75% reduction in the PASI score (PASI 75) is the current benchmark for most clinical trials in psoriasis.

- **Nail psoriasis Severity index.** ^[27]

This scale is used to evaluate the severity of nail bed psoriasis and nail matrix psoriasis by area of involvement in the nail unit. The NPSI will be useful during clinical trials for evaluating response to treatment of psoriatic nails.

PRINCIPLES OF MANAGEMENT:

The principles of management include assessment of signs and symptoms before initiating treatment and the need for management through conventional treatment for associated co-morbidities. If the patient is already under standard conventional care, the physician may advise to continue the same along with add-on Ayurvedic treatment and can assess/consider for tapering or discontinue the treatment in consultation with the conventional physician in the follow ups. Must check about the intake of drugs that can trigger or exaggerate psoriasis in the history of the patient.

According to *Ayurveda*, *Kustha* is a disease that arises due to improper diet and lifestyle (*mithya ahara* and *vihara*)^[28], along with certain causative factors (*nidana*) that also impact psychological aspects. So, in the management of psoriasis, both prevention and curative aspects concentrate on diet, life style and psychological component.

Red Flags

These signs should be assessed before initiating treatment for need for management through modern medicine.

- Patients with generalized pustular psoriasis or erythrodermic psoriasis with high grade fever.
- Psoriatic arthritis significantly impacting a person's physical, psychological or social well-being.
- Psoriasis with co morbid disorders

(A) Prevention Management

Diet

Ayurveda dietary directives termed as *Aṣṭāhāra-vidhi-viśeṣa* [29] principles are essential in diet planning for prevention of psoriasis for high-risk group patients. It is also advised that one's *satmya ahara* (habitual, agreeable food) be served warm, fresh, neither overly dry nor heavy, and consumed mindfully with thorough chewing at a measured pace.

Life style

Ayurveda emphasizes adherence to *dinacharya* (daily routine) and *ritucharya* (seasonal routine), with particular attention to following *dinacharya* in the correct sequence.

Yoga

Various yoga practices may be helpful in the management of psoriasis, such as Shavasana (Corpse Pose), Bhujangasana (Cobra pose), Setu Bandhasana (Bridge Pose), Trikonasana (Triangle Pose), Balasana (Child's Pose). Certain Pranayam and meditation techniques like Anulom Vilom (Alternate Nostril Breathing), Bhramari (Humming Bee Breath), and Kapalbhati (Skull Shining Breath) will also help in reducing anxiety, emotional stress, cellular healing, reducing stress-related inflammation and promoting a positive mental state.

(B) Curative management:

सर्वं त्रिदोषजं कुष्ठं दोषाणां तु बलाबलम्।
यथास्वैर्लक्षणैर्बुद्ध्वा कुष्ठानां क्रियते क्रिया॥ (Ca., Chi.7/31) ||

According to Ayurvedic principles, the treatment of psoriasis primarily depends on identifying the predominant vitiated dosha, as reflected by its clinical manifestations.

Shodhana:

As per Ayurveda classical literature, *Shodhana chikitsa* is indicated in *bahudosha* [33].

The 'Shodhana' will be followed by *rasayana* protocol which aims at stabilizing *dhathu* which helps to prevent recurrence.

Shamana:

Shamana therapy is primarily indicated in conditions with *madhya* (moderate) or *alpa* (mild) *dosha dushti*. Assessment of bahu, madhyama, and alpa doṣa can be integrated with objective parameters-for example, the PASI (area and erythema–induration–desquamation

scores), overall severity of clinical features, and the vulnerability/functional significance of the involved sites (e.g., face, genitals, palms/soles, nail unit, flexures).

Shamana therapy involves both internal and external formulations, such as *kwatha*, *arishta*, *churna*, *ghrita*, *taila*, and *lepa*.

In psoriasis, *bahirparimarjana chikitsa* (external therapy) is particularly beneficial when the vitiated *doshas* are cleared at the level of deeper *dhathus* and get localized at the level of the *twak* (skin)^[34]. In cases of *bahu dosha avastha* (excessive *dosha* aggravation), *Shamana chikitsa* is administered after *Shodhana* therapy, to pacify the remaining *doshas*.

Satvavajayam:

Satvavajaya chikitsa or psychotherapy in Ayurveda is indicated through *dhee*, *dhairya* and *atmaadi vijnaanam*. This has a major role in correcting psoriatic complications including psoriatic depression.

1. Preferable & Restricted Diet and Lifestyle

Table No. 08: Pathya-Apathya (Do's & Don'ts) for Kustha* (Skin Disorders)

All Kustha nidana can be treated as apathya since treatment itself is nidana parivarjanam

Pathya/ Do's	Apathya / Don'ts
• <i>Laghu anna</i> (Light food) • <i>Tikta shaka</i> (green leafy vegetables) • <i>Ghrita</i> (Ghrita) • <i>Mudga</i> (Green gram) • <i>Aadaki</i> (Pigeon pea) • <i>Masoor</i> (Red lentil) • <i>Yava</i> (barley) • <i>Godhooma</i> (wheat) • <i>Madhu</i> (Honey) • <i>Sali</i> (Rice) • <i>Karkati</i> (Cucumber) • <i>Patola</i> (Snake gourd) • <i>Nimbapatra</i> (Neem leaves) • <i>Tila Taila</i> (gingelly oil) • <i>Sarshapa taila</i> (Mustard oil)	• <i>Dugdha</i> (milk) • <i>Dadhi</i> (curd) • <i>Kulatha</i> (horse gram) • <i>Masha</i> (black gram) • <i>Nishpava</i> (green peas) • <i>Ikshu</i> (sugarcane) • <i>Amla Rasa</i> (sour fruits) • <i>Virudha Ahara</i> (incompatible food) • <i>Adhyasana</i> (taking another meal before the earlier one is digested) • <i>Ajeerna</i> (indigestion) • <i>Vishamasana</i> (untimely food) • <i>Vidahi</i> (burning sensation), <i>vishtambhi</i> and • <i>Abhishyandi ahara</i> • <i>Matsya</i> (fish) • <i>Guda</i> (jaggery) • <i>Tila</i> (sesame) • <i>Dravasnigdha</i> (liquid, unctuous and heavy to digest food)
Vihara- Apathya	
• <i>Vegavaraodha</i> (Suppression of natural urges) • <i>Atapasevana</i> (Over exposure to Sun) • Drinking cold water after direct exposure to the sun and after exertion. • Day sleep • Stress • Doing exercise or over exertion immediately after heavy meals • Over exertion after <i>Snehapana</i> & <i>Vamana</i> • Sudden change from cold to heat or heat to cold without following the rules of gradual change • Improper administration of <i>Snehapana</i> and <i>Panchakarma</i> Procedures	

*These are general pathya-apathya guidelines to be followed in skin diseases. However, they may be tailored on a case-to-case basis, taking into account the patient's prakriti, type of Kustha, seasonal variations, and other relevant factors.

B. INTERVENTIONS

At Level 1: Solo physician clinic/health clinic/PHC (Optimal standard of treatment where technology and resources are limited).

Psoriasis cases with mild to moderate severity, BSA<10 can be treated in level 1. BSA>10, non-responding cases of mild to moderate severity and severe cases shall be referred to level 2 and 3. The varieties of psoriasis like guttate, erythrodermic psoriasis, generalized pustular psoriasis, psoriasis with co-morbidities, associated depression, cardiometabolic risks may also be referred to level 2 and 3.

Fastly spreading psoriasis with acuteness of symptoms as in *visarpa*, where continuous monitoring is needed shall be referred to level 2 and 3. Psoriasis with *bahu doshavastha* with recurrences and relapses shall be also referred to level 2 and 3.

Clinical diagnosis: Psoriasis is entirely diagnosed clinically with thorough medical history and physical examination, including BMI. However, some investigations, such as complete hemogram, urine routine/microscopic, C-reactive protein, fasting blood sugar, postprandial blood sugar levels, and serum uric acid levels can be advised.

Management:

Prevention protocol:

Diet: Ayurveda based dietary advisories for prevention of skin disease can be followed as part of primary prevention.

Lifestyle: Life style advocacies based on Ayurveda sleep regimen, *vegadharana*, promotion of *vyayama*, following proper *dinacharya* with *udwarthana therapy* (powder massage) and *rithucharya* to prevent seasonal exacerbations.

Curative Intervention:

At level 1, curative intervention is solely based on *Shamana* protocol based on *dosha* predominance of clinical manifestation.

Plaque psoriasis –Vata kapha Kustha (charma Kustha, eka Kustha, kitibha)-

- In active phase(pro-inflammatory phase),*Manjishtadi kwatha*,*Punarnavadi kwatha*,*Vilwadi gutika*,*Dooshivishari gutika*, *Arogya vardhini gutika*,*Avipatti churna*,*Nishunti shadanga* (Shadanga excluding *sunthi*) ,*Chandrakala Rasa* etc can be advocated.
- *Mahamanjishtadi kwatha* and *Patolakaturohinyadi kwatha* can be given in the sub acute phase.
- *Ayyappala kera taila*, *Dinesavalyadi kera oil*, *Jeevanthyadi yamaka*, *Vajraka ghrtha* and *Mahātikta Ghrta* can be advocated as *Shamana* medicine in *vatakapha* phase.
- The external applications shall be withheld in the *pittanubandha* conditions as in acute phase and shall be only applied after inflammation has been subsided.

Guttate psoriasis, Generalized Pustular psoriasis, Inverse psoriasis- *Pittakapha pradhana Kustha*:

This variant of *pittakapha kustha* is hyper acute generally and hence the *pittakapha hara kashayas* like *Vasaguloochyadi* and *Padolamooladi kashayam* are preferred choices, alongside *Avipatti choornam*, *Amritashadanga panakam*, *Kaisora guggulu* and *Amrita guggulu*. In non-exudative phase *Durvaditaila*, *Nalpamarditaila* etc. can be used externally. In case of associated *Iwara*, *Sudarshana Gutika* and *Mustaparpataka panakam* can be added. *Thiktaka ghrita* and *Mahathiktaka ghrita* can be advocated when active phase of inflammation is over.

Note: If Ama is either minimal or addressed with brief *deepana-pachana*, a small, supervised *samana-sneha* of *Mahatikta Ghrita* / *Tiktaka Ghrita* / *Pancatiktaka Ghrita* (≈ 10 mL, b.i.d.) is beneficial even in acute phases (कुष्ठिनं स्नेहपानेन पूर्व सर्वमुपाचरेत्| AH-19/1)

Palmoplantar psoriasis–

Treatment principle of *vipadika* can be adopted. In exudative and bleeding phase, the medicines mentioned in acute phase of *vata kapha Kustha* can be used. In dry *vata kapha* phases, non-exudative non-painful presentation, medicines mentioned in sub-acute/chronic phases can be advocated. The external applications in subacute and chronic phases include *jeevanthyadi yamaka* and *mahathiktaka ghrita lepa*.

Scalp psoriasis:

The treatment principle is similar to plaque psoriasis. External scalp applications include *Ayyappala kera taila* and *durvadi taila*.

Psoriatic arthritis (*Vatarakta*):

It is seen associated in 30% of psoriasis cases. The treatment principle includes the treatment protocol of plaque psoriasis and *vatarakta* treatment protocol including *Mahamanjishtadi kwatha*, *shaddharanam churna/tablet* and *Simhanada guggulu* for arthritic management.

Manibhadra gula can be used internally in all varieties of psoriasis when active inflammatory phase is over.

The list of *Samanoushadhis* for the management of psoriasis coming under *madhyama* and *alpa dosha* category is given in the table below.

Table 09: List of Samanoushadhis for the management of psoriasis

S. No.	Drugs	Dose form	Dose	Time	Duration	Adjuvants
Kwatha Formulations						
1	<i>Patolamooladi kwatha</i> ³⁵ (<i>kapha pradhana Kustha roga</i> with itching and oozing)	<i>Kwatha</i> (Liquid)	25-50 ml	Morning and evening before food	7 days	<i>Shashtika Sali</i> rice diet with soup as diet during the period
2	<i>Patolakaturohinyadi kwatha</i> ³⁶	<i>Kwatha</i> (Liquid)	25-50 ml	Morning and evening before food	2 weeks or upto clinical response	

S. No.	Drugs	Dose form	Dose	Time	Duration	Adjuvants
3.	<i>Kusthaghna dasaimani gana kwatha</i> ³⁷	Kwatha (Liquid)	25-50 ml	Morning and evening before food	2 weeks or upto clinical response	
4	<i>Aragwadhadi kwatha</i> ³⁸	Kwatha (Liquid)	25-50 ml	Morning and evening before food	2 weeks or upto clinical response	
5	<i>Guduchyadikashaya</i> ³⁹	Kwatha (Liquid)	25-50 ml	Morning and evening before food	2 weeks or upto clinical response	
6	<i>Mahamanjishtadi kwatha</i> ⁴⁰	Kwatha (Liquid)	25-50 ml	Morning and evening before food	2 weeks or upto clinical response	
7	<i>Khadirashtakam kwatha</i> ⁴¹	Kwatha (Liquid)	25-50 ml	Morning and evening before food	2 weeks or upto clinical response	
Gutika formulations						
1	<i>Kaisora guggulu</i> ⁴²	Gutika	Upto 3g daily in divided doses	Morning and evening	2 weeks or upto clinical response	With prescribed kashaya
2	<i>Triphala guggulu</i> ⁴³	Gutika	Upto 3g daily in divided doses	Morning and evening	2 weeks or upto clinical response	With prescribed kashaya
3	<i>Arogyavardhini gutika</i> ⁴⁴	Gutika	250-500mg	Morning and evening	2 weeks or upto clinical response	With prescribed kashaya
4	<i>Vilwadi gutika</i> ⁴⁵	Gutika	1-2 tablets	Morning and evening	2 weeks or upto clinical response	
5	<i>Dooshivishari gutika</i> ⁴⁶	Gutika	1-2 tablets	Morning and evening	2 weeks or upto clinical response	
Arishta formulations						
1	<i>Khadirarishta</i> ⁴⁷	Arishta	12-24ml	Morning and evening	2 weeks or upto clinical response	With equal quantity of water

S. No.	Drugs	Dose form	Dose	Time	Duration	Adjuvants
2	<i>Aragwadharishtam</i> ⁴⁸	<i>Arishta</i>	12-24ml	Morning and evening	2 weeks or upto clinical response	With equal quantity of water
Churna formulations						
1	<i>Triphala churna</i> ⁴⁹	<i>Churna</i>	3-6g	Morning and evening	2 weeks or upto clinical response	With hot water
2	<i>Avipattikara churna</i> ⁵⁰	<i>Churna</i>	3-6g	Morning and evening	2 weeks or upto clinical response	With warm water
3	<i>Pathadi churna</i> ⁵¹	<i>Churna</i>	5-10 g	Morning and evening	2 weeks or upto clinical response	With warm water
4.	<i>Guduchisattwa</i> ⁵²	<i>Sattwa</i>	500 mg-1 g	Twice daily, after food	2 weeks or upto clinical response	Warm water
5	<i>Panchanimba churna</i> ⁵³	<i>Churna</i>	3 -5g	Twice daily, after food	2 weeks or upto clinical response	Warm water or milk or <i>triphala kwatha</i> .
6	<i>Trivrut churna</i> ⁵⁴	<i>Churna</i>	2-3 g or 15-20 g for shodhana	Twice daily before food as shaman or when shodhana is required	2 weeks or upto clinical response for shamana treatment	Warm water or milk or <i>triphala kwatha</i> .
7	<i>Bhunimbadi churna</i> ⁵¹	<i>Churna</i>	3 g or 15-20 g for shodhana	Twice daily before food as shaman or when shodhana is required	2 weeks or upto clinical response for shamana treatment	Warm water or milk or <i>triphala kwatha</i> .
Ghritha Formulations						
1	<i>Tiktakaghritham</i> ⁵⁵	<i>Ghritha</i>	10-15g	Early morning or empty stomach/ at bed time	As <i>vicharanasnehapana</i> till <i>dosha</i> and <i>roga shaman</i> are seen. Also, may be continued as <i>rasayana</i> after <i>rogashamana</i> .	Warm water

S. No.	Drugs	Dose form	Dose	Time	Duration	Adjuvants
2	<i>Mahatiktakaghritam</i> ⁵⁶	<i>Ghritha</i>	12 g.	Early morning or empty stomach/ at bed time	As <i>vicharanasnehapana</i> till <i>dosha</i> and <i>roga shaman</i> are seen. Also, may be continued as <i>rasayana</i> after <i>rogashamana</i> .	Warm water
3	<i>Aragwadhaghritam</i> ⁵⁷	<i>Ghritha</i>	12 g.	Early morning or empty stomach/ at bed time	As <i>vicharanasnehapana</i> till <i>dosha</i> and <i>roga shaman</i> are seen. Also, may be continued as <i>rasayana</i> after <i>rogashamana</i> .	Warm water
4	<i>Mahavajrakaghritam</i> ⁵⁸	<i>Ghritha</i>	12 g.	Early morning or empty stomach/ at bed time	As <i>vicharanasnehapana</i> till <i>dosha</i> and <i>roga shaman</i> are seen. Also, may be continued as <i>rasayana</i> after <i>rogashamana</i> .	Warm water
5	<i>Panchatikta ghrita</i> ⁵⁹	<i>Ghritha</i>	5-10g	Early morning or empty stomach/ at bed time	As <i>vicharanasnehapana</i> till <i>dosha</i> and <i>roga shaman</i> are seen. Also, may be continued as <i>rasayana</i> after <i>rogashamana</i> .	Warm water
6	<i>Panchatiktakaguggulu ghrita</i> ⁶⁰	<i>Ghritha</i>	12 g.	Early morning or empty stomach/ at bed time	As <i>vicharanasnehapana</i> till <i>dosha</i> and <i>roga shaman</i> are seen. Also, may be continued as <i>rasayana</i> after <i>rogashamana</i> .	Warm water
7	<i>Kalyanakaghrita</i> ⁶¹	<i>Ghritha</i>	10-15g	Early morning or empty stomach/ at bed time	As <i>vicharanasnehapana</i> till <i>dosha</i> and <i>roga shaman</i> are seen. Also, may be continued as <i>rasayana</i> after <i>rogashamana</i> .	Warm water
External Application-						
1	<i>Aragwadhaaranala lepana</i>	<i>Lepana</i> – E/A	As per the spread of psoriasis lesions	Once or twice daily	2 weeks or upto clinical response	-

S. No.	Drugs	Dose form	Dose	Time	Duration	Adjuvants
2	<i>Nimbaharidradi churna</i> ⁶²	<i>Lepana</i> – E/A	As per the spread of psoriasis lesions	Once or twice daily	2 weeks or upto clinical response	-
3	Dantapala (<i>Wrightia tinctoria</i> R.Br.) kera/ Vitpalakera prepared by Bhanupaka in coconut oil ⁶³	Oil	Ext application	Once or twice daily	2 weeks or upto clinical response	NA
4	<i>Brhat marichyadi oil</i> ⁶⁴	Oil	Ext application	Once or twice daily	2 weeks or upto clinical response	NA
5	<i>Lajjala Keram</i> ⁶⁵	Oil	Ext application	Once or twice daily	2 weeks or upto clinical response	NA
6	<i>Jeevantiyadi yamakam</i> ⁶⁶	oil	As required for external application	Once or twice daily	2 weeks or upto clinical response	
7	<i>Guggulumarichadi taila Suryatapi</i> ⁶⁶	Oil	As required for external application	Once or twice daily	2 weeks or upto clinical response	
8	<i>Jyotishmati taila</i> ⁶⁷	Oil	As required for external application	Once or twice daily	2 weeks or upto clinical response	
9	<i>Chandanadi taila</i> ⁶⁸	Oil	As required for external application	Once or twice daily	2 weeks or upto clinical response	
10	<i>Sathadoutha ghritha</i>	Ghritha	As required for external application	Once or twice daily	2 weeks or upto clinical response	

Purification/ other procedures (As per applicability)

Since purificatory procedures like *vamana* and *virechana* require *Shodhana snehapana* under strict medical supervision, in level 1, feasibility issues will be there for implementation of *Shodhana* protocol. *Sadya snehapana* followed by *sadyovamana*, *siravedha* can be planned in OPD basis under strict medical supervision.

Follow up: Once in every 15 days or as needed, for effective management of the condition.

Frequent and long term follow up is needed to monitor psoriasis patients to prevent recurrence and monitor remissions and exacerbations, if any.

Referral Criteria

- A PASI score of 5 to 10 is considered moderate disease, and a score more than 10 is considered severe with substantial impact of quality of life and daily living.
- Generalized pustular psoriasis or erythrodermic psoriasis patients can be referred to a higher centre for specific management.

- Uncontrolled co-morbidities
- Evidence of an increase in severity/complications
- Diagnostic uncertainty

At Level 2: (CHC/ Small hospitals (10-20 bedded hospitals with basic facilities such as routine investigation, X-ray)

Clinical Diagnosis:

The case referred from Level 1, or a fresh case must be evaluated thoroughly for any complications. Identification of patient specific etiopathological factors (*nidana*) in diet and lifestyle, classification based on *dosha* involvement and staging of the disease based on *dhatu* involvement should be done to plan the treatment accordingly.

Investigations: The diagnosis would be primarily clinical, along with some investigations which will be necessary to investigate complications or exclude other differential diagnosis as follows:

- Complete blood count/ ESR
- Renal function Test, liver function test,
- Fasting lipids, glucose, and thyroid functions
- Complete urine examination
- High sensitivity C-reactive protein.
- Serum electrolytes
- X-ray of affected Joints (Psoriatic arthritis)
- Tests for Biologics is referred to a specialized tertiary level center

Management

OPD/IPD level management:

In addition to the management mentioned in Level 1, staging and classification of the psoriasis based on *dhatu*s affected and *doshas* involved should be done at level 2 to determine the prognosis and mode of management.

The *sadhya* (curable) *Kustha roga* affecting only *rasa, rakta and mamsa* can be treated at OPD level and *yapya* (managed with strict diet and regimen but not completely curable) *Kustha roga* which affects *medodhatu* should be treated in a hospital with constant follow up to prevent recurrence.

The cases in which only *alpadoshatwa*, is present may be treated at the OPD level with identification of specific *nidanas*, *nidanaparivarjana*, *vicharanasnehapana*, *shodhana*, *naimittikarasayana* and *sesha dosha shamana*. When the psoriatic lesions are limited to skin, it can be treated under the line of treatment of *Kustha rogas* and *raktavritavata*.

When *Shodhana* is done, the *bala* of the patient should be taken into consideration. In *vata* predominant conditions, *snehapana* and *anulomana* with *Kusthaharasnehas* are advised and *madhyama* and *pravarashodhana* are avoided. *Vamana* is indicated in psoriasis with *kapha* predominance and those affecting upper parts of the body (example, scalp psoriasis). *Virechana* is indicated in *pitta* predominance and those affecting lower parts of the body (example, pustular psoriasis, inverse psoriasis). *Shardikavirechana* can be employed for *shodhana* of

pitta in September month where predominant *pitta* vitiation is involved. *Vasantika vamana* can be employed for *shodhana* of *kapha* in February-March months where aggravation of *kapha* is seen.

Madhutailikavasti indicated for *Kustha* and *Prameha* can be given in psoriatic arthropathy which has become chronic and shows signs of *vata pitta* or *vata* involvement. *Nasya* can be effectively used in psoriasis affecting the scalp. It also reduces anxiety and stress and also improves sleep.

If there is *bahudoshatwa*, the patient may be admitted in Level 2 hospital for *Achasnehapana*, *madhyama to pravarashodhana (vamana and virechana)*, *rasayana*, with constant monitoring and observation. When the joints are involved in psoriatic arthropathy, *vatarakta* and *vatavyadhi* line of treatment are applicable.

- *Shodhana* (bio-purificatory measures) including both *vamana* (therapeutic emesis) and *virechana* (therapeutic purgation) after *snehapana* (internal oleation) is the first line of treatment in psoriasis along with external therapies like *Takradhara* (streaming medicated buttermilk over forehead) which has effect on psychosomatic conditions. *Vamana* (therapeutic emesis) and *virechana* (therapeutic purgation) should be followed by *Rasayana chikitsa* (rejuvenation therapy) and finally *Shamana aushadhas* (dosha pacifying medicines) are indicated for *asesha dosha shaman* (complete pacification of doshas) .

Snehapana → *Vamana* → *Snehapana* → *Virechana* → *Rasayana* → *Shamana*.

- The treatments like *Shodhana* and *Rasayana* indicated in *maharogas* (severe illnesses) like *Kustha* involve IPD management with constant monitoring for any *shodhanavyapat* (complications due to bio-purificatory therapies).
- *Rasayana chikitsa* should be done in all cases for preventing recurrence (*apunarbhava*) which is very common in psoriasis due to involvement of autoimmunity (*ojovisramsa*).
- *Asthimajjagata* (for example, psoriatic arthropathy) *Kustha* should be identified and treated after educating the patient for lifelong diet and lifestyle modifications and treatment with constant follow-up.
- In cases where complications which need specialty management are present, patients may be referred to specific departments in level 3.

***Shamana chikitsa* (dosha pacifying therapy):**

The treatment of psoriasis involves both *anta:* and *bahiparimarjana* methods with repeated *shodhana* and *shamana* considering its chronic and recurrent nature. The general line of treatment of *Kustha rogas* are applicable to all psoriatic types but the medicines or drugs may be selected according to the *dosha* involvement in that particular patient and the *dhatu*s and part of the body affected.⁶⁹ The list of *Samanoushadhis* that can be used for the management of psoriasis is given in table No:9

Purification/ other procedures

***Shodhana chikitsa* (bio-purificatory procedures):** A general line of *shodhana* treatment along with **external therapeutic procedures** is given below for psoriasis and psoriatic arthropathy cases which can be modified according to the *dosha* involvement and the conditions of the particular patient.

- i. **Deepana and pachana**- with *Shaddharana churna* or *Hingwashtakachurna*⁷⁰ or *Vaishwanarachurna*⁷¹ or *Ajamojadichurna*⁷² or *Bhaskara lavanachurna*⁷³- 3-6 twice daily before food or *Chitrakadi gutika*⁷⁴ for a duration of 3 days or till the patient have good appetite.
- ii. **Snehapana**- with *Panchatiktakaghrita* or *Aragwadthaghrta* or *Tiktakaghrita* or *Mahatiktakaghrita* - starting from 30 ml till *samyaksnigdha lakshana* (in *arohana* doses increased according to *agni*). Duration of 3 to 7 days. *Sadya snehapana* is indicated in children and adolescents.
- iii. **Abhyanga and Swedana**- *Eladi kera* or *Nalpamaraditaila* or *Nimbaditaila* or any suitable oil as per *dosha* involvement indicated for *Kustha* or *twakroga* followed by *ushnambusnana*. Duration of 3 days.
- iv. **Vamana**- with *Madanapippali*, *Nimba*, *Vacha*, *Saindhava* and *Madhu* (or) *Vacha Yashtimadhu Madanapippali* in *Nimba swarasa* with honey (or) Any *vamana yoga* specifically indicated for skin disease. Duration: One day.
- v. *Samsarjana krama*- *Peyadi karma* as per *avara*, *madhyama* or *pravarashuddhi* for 3/5/7 days.
- vi. **Virechana**- with *Nimbamritadierandataila*, *Avipattikara churna* or *Avipatti choorna*, *Trivrit choorna* or *Triphalakwatha* or other *virechana* drugs according to the *dosha* predominance. Other internal medicines are stopped during *virechana* and restarted during or after *samsarjana krama*.
- vii. *Samsarjana krama* after *virechana* as per *avara*, *madhyama* or *pravarashuddhi* for 3/5/7 days. During *snehapana*, *vamana*, *virechana* and *samsarjana krama* period other internal medicines are stopped.
- viii. **Sarvanga Kashaya dhara**. With *Aragwadhadikashaya* or *Manjishtadikashaya* or *Panchatiktaka Kashaya* or any *twakdosha* and *raktaprasadana kashaya*.
- ix. **Takradhara**- with *Musta Amalakitakra* or *Aragwadhaditakra* or *Manjishtaditakra* or *Panchatiktakatakra* for 7 days. *Takradhara* may be extended to 14 or 21 days as per *dosha* status. In children, *Shirolepam* may be done instead of *dhara*. When *shirolepam* is done, *amalaki* and buttermilk prepared in *kashayasiddha ksheera* are used and *Talam* is also done with *Rasnadi* or *Kachuradichurna* with *Dhanvantaram taila*⁷⁵ or *Bala taila*⁷⁶ or *Nimbamritaditaila*.
- x. **Prachhana/ Raktamokshana/ Siravedha**: As per locations of lesions on *lalata*, *hasta pada* or *shiras*. *Prachhana* is done in *alpadosha* status. In *bahudosha*, *Siravedha* is advised. *Jalooka* can be applied in children.
 - All internal medicines are continued till *dosha* and *rogashamana* also considering *upashaya* and *anupashaya*.
 - *Rasayana* drugs are started after *dosha* and *rogashamana* and continued for a period of one to 6 months.
 - *Ayurvediya Swasthavritta* is to be followed during treatment and continued after complete *rogashamana*.

Table No: 10 List of Rasayana drugs that can be used in the treatment of Psoriasis

Drugs	Dose form	Dose	Time	Duration	Adjuvants
Gandhaka rasayana ⁷⁷	Tablets	250-500 mg	Twice daily, after food	After dosha and rogashamana as rasayana (for a period of one to 6 months).	
Tuvaraka Rasayana ⁷⁸	Taila	Tuvaraka rasayana 10-20 drops	Once daily	Rasayana	Goksheera or butter for tuvaraka rasayana
Bhallataka Rasayana ⁷⁹	Avaleha	Bhallataka Rasayana ½ to 1 g			Ghrita, madhu for Bhallataka rasayana.
Yasada Bhasma ⁸⁰	Bhasma	100mg	Twice daily	As rasayana	
Madhusnuhi rasayana ⁸¹	Avaleha	10- 15 g	Once daily after food	After dosha and rogashamana as rasayana (for a period of one to 6 months).	

Preferable & Restricted Diet and Lifestyle

- As mentioned in Table No 8
- Pathya aims to eliminate factors that trigger or worsen the condition, promoting healing and balance within the body.

Follow Up: Once in every 15 days or as needed, for effective management of the condition.

Strict Pathyaapathya are to be continued for a period equal to or two times the total panchakarma treatment period during follow up.

Naimittika rasayanas should be given on follow up.

Frequent and long term follow up is needed to monitor psoriasis patients to prevent recurrence and monitor remissions and exacerbations, if any.

Referral Criteria

- Same as mentioned earlier at level 1, plus
- Failure of acute exacerbation to respond to initial medical management.
- In erythrodermic patients with generalized pustular psoriasis, patients with febrile and unstable vitals or secondary infections.
- Cases with prominent joint damage and marked functional impairment.
- Uncontrolled complications such as Cardiovascular disease, Cancer, HIV, metabolic syndrome, psychiatric illness or hyperuricaemia.
- Any other complications that threaten the life of the patient.

At Level 3: Ayush hospitals are attached with teaching institutions, District Level/ Integrated/ State Ayush Hospitals, Tertiary care allopathic hospitals having Ayush facilities, and multiple departments/ facilities for diagnosis and interventions. Additional facilities like dieticians, counselling, and physiotherapy must be provided.

Clinical Diagnosis: Same as Levels 1& 2. Confirm diagnosis and severity with the help of investigations such as skin biopsy (only done for cases in which clinical diagnosis is not clear), Further investigations like inflammatory bio markers, ECHO, MRI, CT scan, and chemical analysis of uric acid renal stones, Fibroscan(to detect early liver damage in patients with a history of methotrexate used for 2-3 years and alcohol consumption) etc may be advised as per individual case needs.

Management-

The treatment strategy planning at level 3 is also based on *dosha* dominance and includes purificatory therapies for *bahudosha Kustha*, and subsequent *rasayana* medicines for strengthening the purified *dhathu*, as mentioned in Level 2. In the case of *madhyama dosha* or *alpa dosha Kustha*, *shamanoushadhi* will be utilized as per *dosha* dominance and *dhathu* involvement. The medicines that can be utilized in the treatment of psoriasis is given in Table No: 9. The treatment of psoriasis will not be complete without *nidana parivarjana* or identification and avoidance of etiological factors which may vary from individual-to-individual.

Management of psoriatic complications:

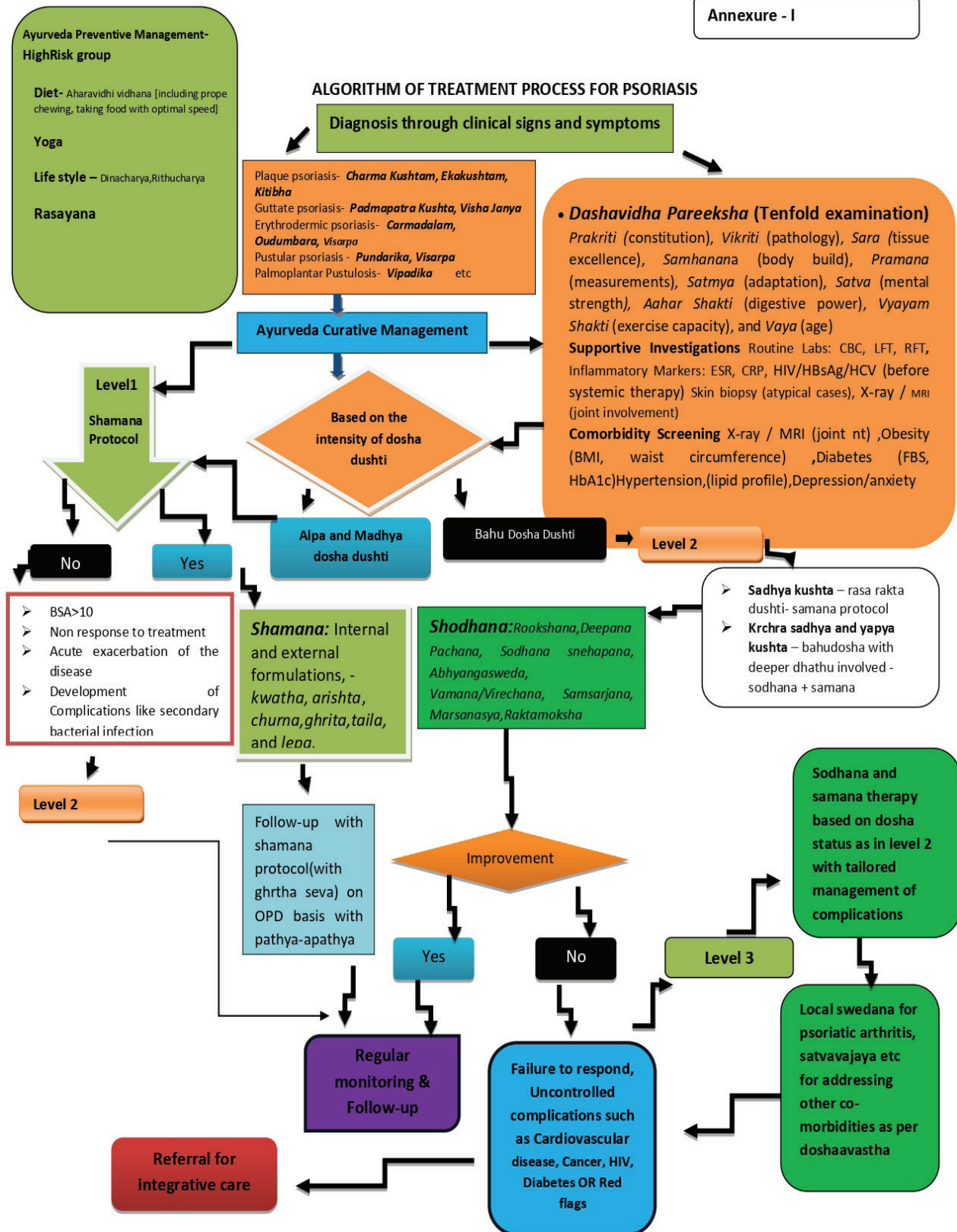
- In metabolic complications associated with psoriasis including metabolic syndrome, NAFLD, anemia and liver cirrhosis, *patolamooladi kwatha*, *patolakaturohinyadi kwatha*, *vasa guduchyadi kwatha*, *arogyavardhini vati* can be advocated
- In psychiatric complications associated with psoriasis, the *snehana samanoushadha* including *kalyanaka ghrita*, *maha kalyanaka ghrita*; *manasa mitravataka*, *takra sirodhara* etc can be advocated.

Preferable & Restricted Diet and lifestyle : Patients should be advised to follow *Pathya* & *restrict Apathya* as mentioned in Table no:8

Follow Up: Strict *Pathya apathya* are to be continued for a period equal to or two times the total panchakarma treatment period during follow up.

Referral Criteria

- Same as mentioned earlier at level 2, plus
- Other modalities can be considered depending on the case.



REFERENCES

1. Christopher, Barker J, Bleiker TO, et al. Rook's Textbook of Dermatology, 4 Volume Set. UK: ninth edition, Wiley-Blackwell; 2023. Page no- 35.1- 35.46.
2. Mease PJ, Gladman DD, Papp KA, et al. Prevalence of rheumatologist-diagnosed psoriatic arthritis in patients with psoriasis in European/North American dermatology clinics. *Journal of the American Academy of Dermatology*. 2013 Nov 1;69(5):729-35.Sharma PV. Dravyaguna Vijnana. 3rd ed.Varanasi: Chaukhambha Bharati Academy; 2007.
3. Dogra S, Mahajan R. Psoriasis: Epidemiology, clinical features, co-morbidities, and clinical scoring. *Indian dermatology online journal*. 2016 Nov 1;7(6):471-80.
4. Wang K, Zhao Y, Cao X. Global burden and future trends in psoriasis epidemiology: Insights from the global burden of disease study 2019 and predictions to 2030. *Archives of Dermatological Research*. 2024 Mar 26;316(4):114.
5. Sardana K, Agarwal P *Psoriasis Textbook of Dermatology and Sexually Transmitted Diseases. 3rd Edition* .CBS Publishers & Distributors Private Limited; New Delhi 2025. Ch 18; 144-153
6. Kamiya K, Kishimoto M, Sugai J, et al. Risk factors for the development of psoriasis. *International journal of molecular sciences*. 2019 Jan;20(18):4347.
7. Naldi L. Risk factors for psoriasis. *Current Dermatology Reports*. 2013 Mar;2(1):58-65.
8. Varshney P, Narasimhan A, Mittal S, Malik G, Sardana K, Saini N. Transcriptome profiling unveils the role of cholesterol in IL-17A signaling in psoriasis. *Sci Rep*. 2016 Jan 19;6:19295.
9. Sardana K, Neema S, Sapra D, Jagadeesan S, Muddebihal A, Kb R, Mistry M, Das T, Chatterjee M. A comparison of anti-IL-17A, anti-TNF, and anti-IL-12/23 biologics for moderate-to-severe plaque psoriasis in India, based on cost per NNT and its effect on the therapeutic landscape and outcome. *Indian J Dermatol Venereol Leprol*. 2025 Aug 19:1-7.
10. Sharma PV. Dravyaguna Vijnana. 3rd ed.Varanasi: Chaukhambha Bharati Academy;2007.
11. Tripathi BD. Ayurvedic Treatment of Skin Diseases (Kustha). *J Ayurveda Integr Med*. 2010;1(2):76–83.
12. Dwivedi SN. Clinical guide to Ayurvedic therapies for skin diseases. 1st ed. New Delhi: Chaukhambha Sanskrit Pratishthan; 2015.
13. Sharma PV. Dravyaguna Vijnana. 3rd ed. Varanasi: Chaukhambha Bharati Academy; 2007.
14. Acharya YT. Charaka Samhita. Varanasi: Chaukhambha Sanskrit Sansthan; 2010.
15. Singh RH. Ayurveda and modern medicine: relevance of chronic systemic disorders and comorbidities. *Ayu*. 2015;36(1):1–7.
16. Joshi VK. Rasayana therapy in Ayurveda: an approach to longevity and quality of life. *J Ayurveda Integr Med*. 2011;2(1):3–5.
17. Gupta R, Manchanda RK. Textbook of Dermatology for Homoeopaths. B. Jain Publishers; 2005.
18. Sharma V, Mohanty S, Chaudhary G. Rupoid psoriasis with inverse psoriasis. *Indian Journal of Dermatology, Venereology & Leprology*. 2024 May 1;90(3).
19. James WD, Elston DM, McMahon PJ. Andrews' diseases of the skin clinical atlas E-book: expert consult. Elsevier Health Sciences; 2016 Dec 27.
20. Aurangabadkar SJ. Co-morbidities in psoriasis. *Indian journal of dermatology, venereology and leprology*. 2013 Jul 1;79:10.
21. Bu J, Ding R, Zhou L, Chen X, Shen E. Epidemiology of psoriasis and comorbid diseases: a narrative review. *Frontiers in immunology*. 2022 Jun 10;13: 880201.
22. Khanna N. Illustrated Synopsis of Dermatology & Sexually Transmitted Diseases-E-book. Elsevier Health Sciences; 2023 Oct 9.

23. Kimmel GW, Lebwohl M. Psoriasis: Overview and Diagnosis. Evidence-Based Psoriasis. 2018 Jul 1:1–16. doi: 10.1007/978-3-319-90107-7_1. PMID: PMC7122924.
24. Basko-Pluska JL, Petronic-Rosic V. Psoriasis: epidemiology, natural history, and differential diagnosis. Psoriasis: Targets and Therapy. 2012 Sep 11:67-76.
25. Balato N, Di Costanzo L, Balato A. Differential diagnosis of psoriasis. The Journal of Rheumatology Supplement. 2009 Aug 1;83:24-5.
26. Clinical Review Report: Ixekizumab (Taltz) Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2017 Sep. APPENDIX 6, Validity of Outcome Measures. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK533695/>
27. Rich P, Scher RK. Nail Psoriasis Severity Index: a useful tool for evaluation of nail psoriasis. Journal of the American Academy of Dermatology. 2003 Aug 1;49(2):206-12.
28. Hariśāstri Parādakara Vaidya, editor. *Aṣṭāṅgahṛdayam* composed by Vāgbhata with commentaries of Aruṇadatta and Hemādri. 9th edition. Varanasi: Chaukhamba orientalia, 2002. *nidanastaana* , 14/2. Edited Book.
29. Agnivesha, Charaka Samhita, Ayurveda Deepika tika of Chakrapani, Chaukhamba Surbharati Prakashan Varanasi, edition 2011 1st chapter Rasa vimanam, Vimana Sthana, shloka 21, p. 235.
30. Brown KW, Berry D, Eichel K, Beloborodova P, Rahrig H, Britton WB. Comparing impacts of meditation training in focused attention, open monitoring, and mindfulness-based cognitive therapy on emotion reactivity and regulation: neural and subjective evidence from a dismantling study. Psychophysiology. 2022 doi: 10.1111/psyp.14024.
31. Jayawardena R, Ranasinghe P, Ranawaka H, Gamage N, Dissanayake D, Misra A. Exploring the Therapeutic Benefits of Pranayama (Yogic Breathing): A Systematic Review. Int J Yoga. 2020 May-Aug;13(2):99-110. doi: 10.4103/ijoy.IJOY_37_19. Epub 2020 May 1. PMID: 32669763; PMID: PMC7336946.
32. Estevao C. The role of yoga in inflammatory markers. Brain Behav Immun Health. 2022 Feb 1;20:100421. doi: 10.1016/j.bbih.2022.100421. PMID: 35199049; PMID: PMC8842003.
33. Agnivesha, Charaka Samhita, Ayurveda Deepika tika of Chakrapani, Chaukhamba Surbharati Prakashan Varanasi, edition 2011 16th chapter chikitsa prabhurutheeyam, sutra sthana, shloka 23-26.
34. Hariśāstri Parādakara Vaidya, editor. *Aṣṭāṅgahṛdayam* composed by Vāgbhata with commentaries of Aruṇadatta and Hemādri. 9th edition. Varanasi: Chaukhamba orientalia, 2002. *chikitsastaana* , 19/56. Edited Book.
35. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.184-185.
36. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.183-184.
37. Agnivesha. Charaka Samhita. Ayurveda Deepika commentary by Chakrapani. Varanasi: Chaukhamba Surbharati Prakashan; 2011. Sutra Sthana, shloka 11.
38. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part 1.. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.170-171.
39. Government of India. The Ayurvedic Pharmacopoeia of India. 1st English ed. Part. 2. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2000. P.40
40. Anonymous. Sahasrayoga. 1st ed. New Delhi: Central Council for Research in Ayurvedic Sciences; 1990. P. 79. Edited by Mahendrapal Singh Arya
41. Anonymous. Sahasrayoga. 1st ed. New Delhi: Central Council for Research in Ayurvedic Sciences; 1990. P.22 .Edited by Mahendrapal Singh Arya

42. Government of India. The Ayurvedic Pharmacopoeia of India. 1st ed. Part 2 Vol. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2007. p.94
43. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.212.
44. Kaviraj Govinda Das Sen. Bhaisajyaratnavali. Siddhipada Hindi Commentary, Prof. Siddhinandana Mishra editor. 1st edition. Kustharogadhipika, Chapter no-54, Verse no-117, Varanasi: Chaukhamba Surbharati Prakashana; 2012.p.871
45. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.523-524
46. Gupta KA, editor. Ashtanga Hridaya of Vagbhata. 12th ed. Varanasi: Chaukhamba Sanskrit Sansthan; 1997. p. 577
47. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.60-61.
48. Ministry of Ayush. Essential List of Medicine for Ayurveda. Page 16. Available from: https://eaushadhi.gov.in/ayush/download/external/Notification/Essential_Ayurvedic_Medicines.pdf.
49. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.323-324.
50. Government of India. The Ayurvedic Pharmacopoeia of India. 1st ed. Part 2 Vol. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2007. p.41
51. Gupta KA, editor. Ashtanga Hridaya of Vagbhata. 12th ed. Varanasi: Chaukhamba Sanskrit Sansthan; 1997. p. 408.
52. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.561.
53. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part.2. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.89-90.
54. Khushwaha HCS, Charakasamhita of Agnivesa Ayurveda Dipikas Ayusi hindi commentary.1st ed. Varanasi. Chaukhamba orientalia; 2009. P.777
55. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.249-250.
56. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.283-285
57. Gupta KA, editor. Ashtanga Hridaya of Vagbhata. sutrasthana15/18,12th ed. Varanasi: Chaukhamba Sanskrit Sansthan; 1997.
58. Gupta KA, editor. Ashtanga Hridaya of Vagbhata. 12th ed. Varanasi: Chaukhamba Sanskrit Sansthan; 1997. p. 406
59. Government of India. The Ayurvedic Pharmacopoeia of India. Part 2. Vol. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2008. p.117
60. Government of India. The Ayurvedic Formulary of India (AFI), Part-I, 6:27.. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2008. p.270
61. Government of India. The Ayurvedic Pharmacopoeia of India. First edn. Part 2. Vol. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2007. p.75

62. Gupta KA, editor. Ashtanga Hridaya of Vagbhata. 12th ed. Varanasi: Chaukhamba Sanskrit Sansthan; 1997. p. 408
63. Anonymous. Sahasrayoga. 1st ed. New Delhi: Central Council for Research in Ayurvedic Sciences; 1990. P. 259 . Edited by Mahendrapal Singh Arya
64. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part 2. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.113-114
65. Chagama MK, Paikrao S, Dhoke SP, Khanduri S, Jameela S, Ram J, Sharma BS, Singhal R, Rana R, Chandrasekhararao B, Maheshwar T, Srikanth N, Dhiman KS. Effect of Ayurvedic formulations, Ayush NT capsule and Ayush LK gel in the management of Psoriasis- An open-label, single-arm multicentre study. Indian J Tradit Knowl. 2025 Apr;24(4):329-38. doi:10.56042/ijtk.v24i4.12522.
66. Gupta KA, editor. Ashtanga Hridaya of Vagbhata. 12th ed. Varanasi: Chaukhamba Sanskrit Sansthan; 1997. p. 411
67. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.389-390.
68. Government of India. The Ayurvedic Pharmacopoeia of India. 1st ed. Part 2 Vol. 4. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2017. p.81
69. Rai P, Yadav CR, Devi D. Randomized Clinical Trial to Study the Effect of Kunjal Kriya and Guduchyadi Kwath in Mandal Kushtha (Psoriasis). AYUSHDHARA [Internet]. 2024 [cited 2025 Jul 10];8–16. Available from: <https://ayushdhara.in/index.php/ayushdhara/article/view/1838>
70. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.353.
71. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.344-345.
72. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.308-309.
73. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.340-341.
74. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.515-516.
75. Government of India. The Ayurvedic Pharmacopoeia of India. 1st ed. Part 2 Vol. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2007. p.117.
76. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.413-416.
77. Government of India. The Ayurvedic Pharmacopoeia of India. 1st English ed. Part 2. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2000. P.81-83
78. Gupta KA, editor. Ashtanga Hridaya of Vagbhata. 12th ed. Varanasi: Chaukhamba Sanskrit Sansthan; 1997. P.599.
79. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Vol. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.339.

80. Srikanth, Narayanam & Khanduri, Shruti & Rana, Rakesh & Dhiman, Kartar & Jameela, Sophia & deep, Vishav & Maheswar, Thugutla & Radhakrishnan, P & Gupta, Bharti & Debajyoti, Das & Mitra, Achintya & Hazra, Jayram & Padhi, Madan. (2019). Clinical Study to Evaluate the Efficacy and Safety of Comprehensive Ayurvedic Therapy in Plaque Psoriasis: An Open-label Multicentric Prospective Study. *Journal of Research in Ayurvedic Sciences*. 3. 39-47. 10.5005/jras-10064-0074.
81. Rajani CH, Belavadi S. A comparative clinical study to evaluate the effect of madhusnuhi rasayana and shiva gutika in kitibha kushtaKustha with special reference to psoriasis. *JAHM* [Internet]. 2023May19 [cited 2025Jul.10];11(4). Available from: <https://jahm.co.in/index.php/jahm/article/view/750>

04

URTICARIA (शीतपित्त)



URTICARIA

(*Sheetapitta*)

ICD 10 code: L50.0- 50.9

ICD 11 Code: EB00.1

ICD-11 TM 2 (*Sitapittam- SN4K*)

NAMC Code: ED-14 शीतपित्तम्

ED-14.1 शीतपित्त-पूर्वरूपम्

CASE DEFINITION

Urticaria (hives) is characterized by the rapid onset of lesions known as wheals that consist of a central mid dermal swelling with or without surrounding erythema, with associated pruritus, lasting anywhere from 1 to 24 hours. The term urticaria is named after the stinging nettle plant (*Urtica dioica*), which contains histaminic acid. Associated angioedema can sometimes be seen, characterized by swelling of the deeper dermis and subcutaneous tissue lasting up to 72 hours.^{1,2}

Sheetapitta is a clinical condition characterized by the presence of elevated patches in the skin resembling that produced by the sting of the wasp (*Varaṭīdaṣṭasaṁsthāna sotha*), and is associated with itching (*Kandu*), pricking pain (*Todabahulah*) vomiting (*Chhardi*), fever (*Jvara*) and burning sensation (*Daha*). The term *Udarda* is also used to denote a similar condition. In *Sheetapitta*, *Vata* is more predominant while *Udarda* is a *kapha* dominant condition. Elevated reddish, itchy, round patches in the skin appearing in *Sisira ritu*, due to *kapha dosha kopa* is called *Udarda*.³

INTRODUCTION³⁻⁶ (*Incidence/ Prevalence, Morbidity/ Mortality/ Risk Factors*)

Urticaria is a common skin disease. About 8–20% of individuals in the community experience an attack of urticaria at least once in their lifetime.⁴

It can be seen in all ages and sexes but is slightly more common in young adults. In 40–50% of the patients, urticaria and angioedema are seen in combination, only urticaria or angioedema is seen in 40% and 20% of the people, respectively.⁵

Urticaria is a mast cell–driven disorder characterized by the recurrent development of hives (urticaria) and/or swelling (angioedema).⁴

Urticaria affects nearly 1% of the world population, with over 100 million new cases each year. India lacks specific epidemiological studies but contributes heavily to total global burden.

Chronic cases appear commonly in adults, especially women. India bears a significant burden of urticaria in absolute terms—accruing the highest number of Disability-Adjusted Life Year (DALYs) globally.

In children (<14 years) at a tertiary hospital in Northern India, 57% had spontaneous urticaria; about 12% had dermatographism, 2% had cold-induced, 1.3% aquagenic, and 1.7% cholinergic urticaria.^{6,7}

The etymology of Sheetaapitta denotes two words, *Sheeta* and *Pitta*. Here, *Sheet* denotes *Kapha* and *Vata dosha*.

ETIOPATHOGENESIS

The underlying event leading to urticaria is mast cell degranulation, with release of histamine and other proinflammatory molecules. There are numerous stimuli that can lead to mast cell activation through various pathways (Fig.1).

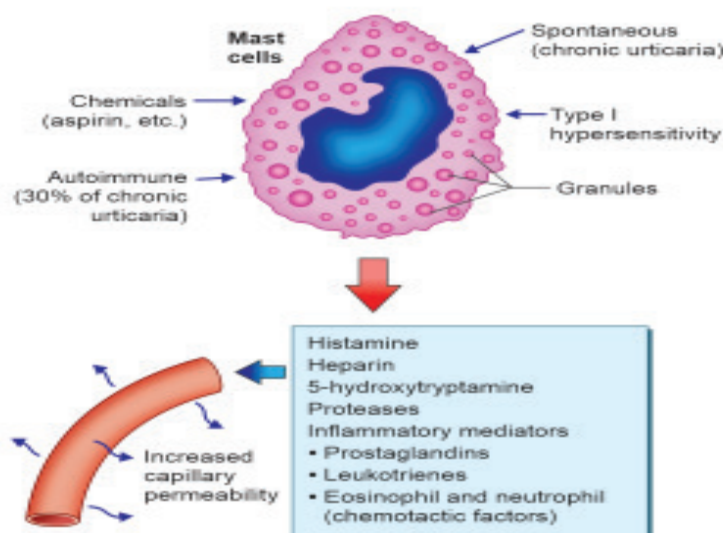


Fig1: Diagrammatic Overview of Urticaria

This release can be triggered by allergic, pseudoallergic, toxic, and physical mechanisms ¹

- Urticaria is allergic when specific antigens crosslink specific IgE antibodies attached to mast cells.
- Pseudoallergic urticaria describes the release of mast cell mediators after exposure to foods or medications but without the presence of specific immunoglobulin (IgE) antibodies.
- Endogenous or exogenous substances such as opiates, codeine, or complement proteins can alter the sensitivity of mast cells to both the stimuli.

1. Acute urticaria

The most common cause of acute urticaria is viral infections, particularly of the upper respiratory tract. Other common causes of acute urticaria are listed in the box below. Food-induced type I hypersensitivity reactions are a rare cause of acute urticaria in adults, but occur more commonly in children.

Table 1- Causes of Acute Urticaria¹

Causes of Acute Urticaria	
Infections (~40%)	Viral respiratory, especially rhinovirus and rotavirus (cause in 80% of children), <i>Helicobacter pylori</i> , <i>Mycoplasma</i> , hepatitis, mononucleosis, and parasitic helminths

Causes of Acute Urticaria	
Drugs (~10%)	Beta-lactam antibiotics, nonsteroidal anti-inflammatory drugs (NSAIDs), aspirin, ACE inhibitors, diuretics, opiates, contrast media, and blood
Foods (~1%) - Adults	Shellfish, fresh water fish, berries, nuts, peanuts, pork, chocolate, tomatoes, spices, food additives, and alcohol
Foods (~1%) - Children	Milk and other dairy products, eggs, wheat, and citrus
Inhalants	Pollens, molds, dust mites, and animal dander
Systemic diseases	Lupus erythematosus, Still's disease, thyroid disease, cryoglobulinemia, mastocytosis, and carcinomas
Emotional stress	
~50% Idiopathic	

2. Chronic urticaria: The most common underlying causes of chronic urticaria are:

- Autoreactivity or expression of circulating mast cell secretagogues including autoantibodies (autoimmune urticaria). This is now known as Type IIb CSU.
- Autoallergic Variety also known as Type I CSU.
- Chronic infections.
- Intolerance to food components.

Table 2 : Causes of Chronic Urticaria ¹

Autoreactivity	Autoimmunity (anti-FcεRI-Ab, anti-IgE-Ab) (40–50%)
Chronic infection	Hepatitis B, H. pylori
Intolerance	Foods, drugs, pseudoallergy
Other causes	Type I allergy, internal disease
Idiopathic	~50%

Though not all the factors listed above are seen in all cases, it must be noted that patients of CSU should NOT be subjected to detailed investigations. In majority of patients with chronic urticaria, an underlying disease will not be found.

Aetiology as per Ayurveda:

On exposure to cold wind, *Kapha* and *Vata doshas* get vitiated, associates with *pitha dosha* and causes *Sheetapitta*.

Aaharaja hetu –

- Santarpana* (Overnourishment)
- Atilavana sevan atiamla sevan* (Excessive use of salt and sour food)
- Katu sevan, kshara sevan* (Excessive use of spicy and alkaline foods)
- Tikshna madya sevan* (Excessive intake of strong alcohol)
- Viruddha aahara sevan* (Intake of incompatible foods)
- Adhyasana* (Intake of food before complete digestion of earlier food)
- Guru dravya sevan, snigdha bhojana sevan* (Excessive intake of heavy and fatty meals)
- Dadhi sevan* (Excessive intake of curd)

ix. *Visha-yukta annapana sevan*. (Consumption of poisoned food articles)⁸

Viharaja hetu –

- i. *Sheeta maruta Sparsha* (Exposure to cold air)
- ii. *Vishyuktajal snana, abhyanga, udvartana, vastra, aabhushana* (Contact with poisonous substances externally for bath, massage, powder massage, clothes and ornaments.)
- iii. *Keeta damsha, bahya krimi* (Insect bite, external worm infestation)
- iv. *Chhardi nigraha, atidiwaswapna* (Suppression of vomiting, excessive day sleep)
- v. *Shishir ritu, varsha kala, diwaswapna* (Day sleep in winter and rainy season)⁸

Nidanaarthakara roga –

As a complication of *sannipatika, pittaja, and kaphaja jwara, unmada, adhoga amlapitta*.

Chikitsa mithya yoga— *vamana-virechana ayoga*. (Improperly administered purification therapies)⁹

CLINICAL PRESENTATION¹⁰⁻¹⁴

- **Lesion morphology:** Wheals are abrupt, well-circumscribed, raised, itchy erythematous to pale lesions varying from millimeters to several centimeters; they appear, migrate, and typically resolve within twenty-four hours without residual marks. They cause intense pruritus and/or burning sensations.
- **Angioedema:** Characterized by sudden swelling of deeper dermis, subcutaneous tissue, or mucosa (e.g., lips, eyes, genitals); often painful (not pruritic), resolving within up to 72 hours
- **Distribution & duration:** Can affect any part of body, including scalp, palms, and soles.
- **Associated symptoms:** May include systemic manifestations like headache, dizziness, throat tightness, wheezing, GI discomfort (nausea, vomiting, diarrhea), arthralgia, fever etc.
- **Dermographism & physical triggers:** Stroking skin may reproduce wheals (“dermatographism”) within minutes; characteristic of physical urticaria-physical factors (pressure, temperature changes, vibration, sunlight) may precipitate symptoms
- **Alarming features indicating vasculitis or anaphylaxis:** Wheals lasting more than 24 hours, painful, non-blanching, or leaving purpura/hyperpigmentation suggest urticarial vasculitis. Associated symptoms such as hypotension, stridor, GI symptoms, or confusion point toward systemic anaphylaxis.



Fig 2: Urticaria: pale pink edematous wheals with a surrounding flare



Fig 3: Urticaria: itchy pink wheals

Courtesy: Illustrated Synopsis of Dermatology and Sexually Transmitted Diseases, Neena Khanna Fourth edition.

CLINICAL EXAMINATION

Clinical examination of urticaria involves assessing the patient's overall health, including vital signs, identifying potential triggers (as mentioned in tables 1 & 2), and performing a physical examination of the urticarial lesions.

The physical examination of urticaria includes¹⁵

- Type/Appearance of lesion.
- Size
- Shape
- Colour of lesion
- Margin
- Number
- Site of lesion
- Distribution-whether lesions are localized or generalized.

Table 3: Classification of urticaria

Classification of urticaria is based on duration and caus ^{e16-18}	
Acute spontaneous urticaria	Characterized by the sudden appearance of wheals and/or angioedema lasting less than six weeks.
Chronic spontaneous urticaria (CSU)	Refers to spontaneous wheals and/or angioedema persisting for six weeks or longer. This term is interchangeable with "urticaria" or "chronic idiopathic urticaria." There are two types Type I and Type IIb
Chronic inducible urticaria (CIndU)	Involves wheals triggered by physical stimuli (e.g., pressure, temperature changes) that continue for six weeks or more—also known as "physical urticaria."
Summary for different types of classifications for urticaria ¹⁶⁻¹⁸	
Category	Subtypes/ Examples
Acute (<6 weeks)	Spontaneous (infection, allergy, idiopathic).
Chronic (≥6 weeks) aka CSU	CSU (no trigger) and CIndU (physical/special triggers).
Inducible Urticaria	Dermatographic, Cold, Heat, Delayed pressure, Solar, Vibratory, Aquagenic, Cholinergic, Contact, Adrenergic.
Contact Urticaria	Contact with chemicals found in foods, plants, and medicines elicits urticaria.

Clinical Presentation in Ayurveda

Purvarupa/ Premonitory symptoms

The premonitory symptoms of the *Sheetapitta* are – thirst, loss of taste, nausea, debility in the body parts, and feeling of heaviness in the body and redness of the eyes.¹⁹

Samprapti / Pathogenesis

*Prakupita Vata and Kapha (Pradushta Kapha Maaruta) due to Sheeta Maarutadi Nidana and Sheeta Maaruta Samsparsha (exposure to cold air and objects) when being amalgamated with Pitta (Pittena Saha Sambhooya) spreads internally and externally (Bahir Antah Visarpah) and results in Sheetapitta-Udarda-Kotha.*²⁰

Sheetapitta Lakshana: Clinical symptoms ²¹

Table 4: Clinical Symptoms of Sheetapitta

S.No.	Symptom	Meaning
1	वरटीदृष्टसंस्थानः शोथः सञ्जायते बहिः	Inflammation like an insect bite; Red elevated rashes with clearly defined edges on the skin
2	सकण्डू	Severe itching
3	तोदबहुल	Excessive pricking pain
4	छर्दि	Vomiting
5	ज्वर	Fever
6	विदाहवान्	Burning Sensation
7	सोत्सङ्ग सराग मण्डल	A central wheal surrounded by an erythematous halo
8	क्षणिकोत्पत्ति विनाशह	Flares will appear and disappear immediately.

Samprapti ghataka: -

- Dosha Tridosha
- Agni Manda
- Doshagati Vridhi, Tiryak, Shakha,
- Vyadhimarga Bahya
- Dushya Rasa, Rakta
- Srotas Rasavaha, Raktavaha
- Sroto dushti, prakara Vimarga Gamana
- Udbhava Sthana Aamashaya
- Vyakti Sthana Tvak

DIFFERENTIAL DIAGNOSIS ^{22,23}

Table 5: Differential Diagnosis of Sheetapitta

Differential diagnosis	Characteristic and diagnostic features
Urticarial vasculitis	Wheals lasting >24 h, often painful/burning, with residual hyperpigmentation or purpura. May present with systemic symptoms (fever, arthralgia, nephritis); biopsy shows leukocytoclastic vasculitis.
Cutaneous mastocytosis (urticaria pigmentosa)	Brown/orange lesions, positive Darier's sign (wheal upon stroking), smaller fixed lesions.

Differential diagnosis	Characteristic and diagnostic features
Bullous pemphigoid (prodromal)	i. Urticarial plaques evolving into tense bullae; histopathology shows subepidermal blisters with eosinophilic infiltrate.
Urticarial dermatitis	Mix of urticarial wheals and eczematous patches; spongiosis and lymphocytic infiltrate on biopsy.
Cutaneous lupus erythematosus	May mimic urticaria; biopsy reveals interface dermatitis, basal vacuolization, mucin deposition.
Henoch–Schönlein purpura, (IgA vasculitis), cryoglobulinemia	Purpuric vasculitis lesions, systemic signs (renal, joint, abdominal).
Fixed drug eruption	A drug reaction that occurs at the same location on skin with each exposure to a specific drug, potentially mimicking urticaria.
Atopic dermatitis	It can sometimes present with urticarial appearing lesions.
Insect bites	It can cause localized urticarial lesions.
Pityriasis rosea	It may be mistaken for urticaria due to its appearance, but it has a characteristic herald patch and follows a specific pattern of distribution.
Contact dermatitis	It can sometimes manifest as urticarial lesions, especially in irritant or allergic contact dermatitis.
Sweet syndrome (Acute febrile neutrophilic dermatosis)	The condition may present with urticarial lesions (oedematous, erythematous plaques that can mimic urticaria) along with fever and other systemic symptoms.

Differential Diagnosis in Ayurveda

Differential diagnosis of *Sheetapitta* should be made from *Udarda*, *Kotha/Utkotha*, *Visarpa* and *Kotham -Kustha*.

Sheetapitta is associated with picking pain and itching, aggravated at evening time. The differentiation is given as:

- **Udarda:** considered a *Tridoshaja Vyadhi*, *Kapha* produces *kandu*, *Vata* induces *toda* and *Chardi* and *jvara* by *Pitta* with *Kapha* predominance, distinguishing it from *Sheetapitta*, which has *Vata-Pitta* dominance. Skin eruptions look alike, but *Kapha dosha* is predominant ; *Udarda* is usually aggravated at morning and sometimes it looks like skin colour.
- **Kotha/Utkotha:** features like itching and swelling are more prominent. In *Kotha eruptions* are numerous in number and small in size ²⁴
- **Visarpa:** Rapidly spreading skin lesions, often with systemic symptoms.²⁵
- **Kotham-Kustha:** not an acute condition- discoloration, scaling, oozing, and localized skin disease; *Sheetapitta* is more acute and episodic. *Kotham* (Kustha/skin disease, often psoriasis or eczema-like) is considered a *Kapha–Pitta* dominant disorder with deeper tissue involvement.²⁶

SUPPORTIVE INVESTIGATIONS²⁷⁻³⁴

Some principles that determine the investigation are:

1. Acute urticaria is generally not investigated.
2. Acute recurrent urticaria is frequently clarified with a history, as a possible trigger (food, medication, activity) can be identified. One should not forget to enquire about mucosal contacts, such as toothpaste, latex condoms, or even semen. Everything that comes in contact with the mucosa should be sought for, like drugs (prescription and over-the-counter; ask directly about aspirin and nonsteroidal anti-inflammatory drugs [NSAIDs]), all foodstuffs including spices, drinks and even chewing gum.
3. Chronic urticaria often remains idiopathic. Now there is a concept of endotypes and there are certain investigations that can be employed to differentiate the types of CSU, but they relate to the course and preferred treatment and need expert interpretation by centres that are proficient in these tests. Certain drugs like anti histamines, Omalizumab and BTK inhibitors are prescribed on the basis of these tests and endotype classification.

We will detail the current investigation strategy for Acute and CSU keeping the principles as above in view based on the best current evidence [Table 6 and 7]. Provocation tests for CINDU are given in Table 8

Investigations for Acute Urticaria

Table 6: Investigations for Acute Urticaria

1. Full blood count with differential white cell count 2. CRP levels and/or ESR 3. Culture of relevant specimens 4. Serum allergen-specific IgE tests* 5. Prick tests* 6. Oral drug challenge tests	Most cases do not need any testing
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*ONLY if IgE mediated Type 1 hypersensitivity is suspected as a cause of urticaria, avoid unnecessary testing. [Sardana K. Urticaria and Angioedema Current Insights. CBS Publishers & Distributors Private Limited; 2022.]

Investigations for Chronic spontaneous urticaria (CSU)

Table 7: Investigations for Chronic spontaneous urticaria (CSU)

Differential blood count. ESR and/or CRP, IgG anti- TPO and total IgE	Routine Tests
i. Infectious diseases ii. Thyroid Gland disorders (thyroid hormones and autoantibodies) iii. Concomitant CINDU (see below) iv. Severe systemic diseases (e.g. tryptase) v. Other (e.g. lesional skin biopsy)	Extended diagnostic Tests For identification of underlying causes or eliciting factors and for ruling out possible differential diagnoses if indicated based on history.

Sardana K. Urticaria and Angioedema Current Insights. CBS Publishers & Distributors Private Limited; 2022.

Investigations for Chronic inducible urticaria (CIndU)

Table 8: Investigations for Chronic inducible urticaria (CIndU)

Challenge test/ Provocative test: Recommendations for confirming the relevance and threshold of triggers for inducible urticaria.	Type	Challenge test
	Cold Urticaria	Apply cold stimulus (e.g. ice cube on forearm) and observe for wheal-and-flare reaction during skin rewarming.
	Heat urticaria	Heat provocation and threshold test.
	Solar urticaria	Photo Test to various wavelengths of light.
	Symptomatic dermatographism	Stroke skin with firm object (e.g. tongue blade or other instrument with a firm edge.), or a dermatographometer.
	Cholinergic urticaria	Provocative challenges that increase body temperature (e.g. exercise, hot water immersion)

DIAGNOSTIC CRITERIA

The diagnosis will be done based upon the clinical presentation, clinical examination and investigations as mentioned above.

- **Ayurvedic Diagnostic Approach:**
- **Nidana (Etiological Factors):** Includes exposure to cold breeze, incompatible foods (*Viruddha Ahara*), and seasonal triggers.
- **Dosha Assessment:** Predominant involvement of *Vata* and *Pitta* with *Rakta* and *Rasa* as affected dhatus.
- **Twak Vikara Evaluation:** Observation of skin lesions, itching (*Kandu*), burning sensation (*Daha*), and swelling (*Shotha*).
- **Rogabala and Vyadhibala:** Strength of the disease and the patient's immunity are considered for treatment planning.

PRINCIPLES OF MANAGEMENT

The principles of management include assessment of signs and symptoms before initiating treatment and the need for management through conventional treatment for associated co morbidities. If the patient is already under standard care, the physician may advice to continue the same along with add-on Ayurvedic treatment and can be assessed for the same in the follow ups for tapering or discontinue the treatment in consultation with the conventional physician.

Red Flag Signs

These signs should be assessed before initiating treatment for need for management/consultation through modern medicine.

- Angioedema of airway structures & family History.
- Respiratory distress (stridor, wheezing).

- Cardiovascular signs (hypotension, tachycardia, syncope).
- Hives that persist > 24–48 hours or ulcerate.
- Systemic signs (fever, weight loss, night sweats, arthralgia). Chronic hives (> 6 weeks).
- Urticaria as a part of severe allergic reaction.
- Urticaria with symptoms of anaphylaxis (dizziness, breathing troubles and swelling of tongue, lips, mouth or throat).

(A) Prevention Management^{35,36}

- ✓ Hydration: Maintain adequate water intake to support skin hydration and overall health.
- ✓ Avoid known triggers. (Nidana Parivarjan)
- ✓ Regular moderate exercise: Promotes immune balance.
- ✓ Sleep and environmental controls: Ensure proper sleep hygiene; maintain cool, well-ventilated surroundings; choose breathable, loose cotton clothing.
- ✓ Bath and change of clothes: If pollen or animal contact has triggered urticaria in the past, take a bath and change clothes.

Yoga³⁷

Regular practice of yogic techniques such as Neti (nasal cleansing), selected Asanas—including Tadasana (Palm Tree Pose), Trikonasana (Triangle Pose), Veerabhadrasana I & II (Warrior Poses I & II), Setu Bandhasana (Bridge Pose), and Shavasana (Corpse Pose)—along with breathing practices (Pranayama) such as Nadi Shodhana (alternate nostril breathing), Bhramari (humming bee breathing), and Sheetalī (cooling breath), play a significant role in maintaining overall health.

These practices collectively help in reducing psychological stress, improving blood circulation, facilitating detoxification, and regulating immune function. Furthermore, the inclusion of Dhyana (meditation) and Yoga Nidra (yogic relaxation) enhances mental stability and promotes psychosomatic balance. Together, these interventions contribute to strengthening the body's natural defense mechanisms and may aid in reducing the risk or progression of disorders such as Urticaria.

(B) Curative Interventions

Line of treatment:

The treatment of *Sheetapitta* is based on the *doshagati*³⁸ and includes *Shamana*, *shodhana*, and *Bahi Parimarjana Chikitsa*.³⁹ *Krimighna* and *Dadrughna* drugs can also be added subject to involvement of *dosha*⁴⁰ and the line of treatment is similar to that of *Kushtha*, *Amlapitta* and *Udarda*.⁴¹

Internal Medications

Table 9: Internal Medications for Sheetapitta

S.No.	Drugs	Dosage form	Dose	Time	Duration	Adjuvants
1.	<i>Haridra khand</i> ⁴²	Churna	5-10 Gms	BD (A/F)	One month	Milk
2.	<i>Nimbadi Churna</i> ⁴³	Churna	3-5 Gms	BD (A/F)	One month	Water

S.No.	Drugs	Dosage form	Dose	Time	Duration	Adjuvants
3.	<i>Triphala Churna</i> ⁴⁴	Churna	3-5 Gms	BD (A/F)	One month	Water
4.	<i>Guduchi (Tinospora cordifolia)</i> ⁴⁵	Churna	3-5 Gms	BD (A/F)	One month	Water
5.	<i>Eladi Churna</i> ⁴⁶	Churna	3-5 Gms	BD (A/F)	One month	Water
6.	<i>Shudh Gairik</i> ⁴⁷	Churna	250 mg	BD (A/F)	15 days	Honey or cold water
7.	<i>Shankh bhasma</i> ⁴⁸	Bhasma	250 mg	BD (A/F)	15 days	Honey or cold water
8.	<i>Muktashukti Bhasma</i> ⁴⁹	Bhasma	250-500 mg	BD (A/F)	15 days	Water
9.	<i>Duralabadi kashayam</i> ⁵⁰	Decotion	25-50 ml	BD (A/F)	One month	NA
10.	<i>Panchatikta Kashaya</i>	Decotion	25-50 ml	BD (A/F)	One month	NA
11.	<i>Ushirasav</i> ⁵¹	Liquid	20 ml with equal water	BD (A/F)	One month	water
12.	<i>Sutashekara ras</i> ⁵²	Tablet	250-500 mg	BD (A/F)	15 days	Sita yukta Dugdha
13.	<i>Gandhaka Rasayana</i> ⁵³	Tablet	250-500 mg	BD (A/F)	15 days	Milk
14.	<i>Arogyavardhini Vati</i> ⁵⁴	Tablet	250-500 mg	BD (A/F)	15 days	Water
15.	<i>Sheetapitta bhanjani ras</i> ⁵⁵	Tablet	125-250 mg	BD (A/F)	15 days	Ghee or Honey
16.	<i>Kamadudha rasa</i> ⁵⁶	Tablet	250 mg	BD (A/F)	15 days	Sita or Jiraka
17.	<i>Chandrakala Rasa</i> ⁵⁷	Tablet	250 mg	BD (A/F)	15 days	Cow's milk, sugar, or honey
18.	<i>Krimimudgara rasa</i>	Tablet	250mg	BD (A/F)	15 days	Water

External Applications

S. No.	Drugs	Dosage form	Dose	Time	Duration	Adjuvants
1.	<i>Nimbadi taila</i>	Taila	QS	As per requirement	15 days	-
2.	<i>Eladi taila</i> ⁵⁸	Taila	QS	As per requirement	15 days	-
3.	<i>Karanja taila</i> ⁵⁹	Taila	QS	As per requirement	15 days	-

Preferable & Restricted Diet and Lifestyle

Table 10: Pathya-Apathya (Do's & Don'ts) for Sheetapitta*⁶⁴

Pathya/ Do's	Apathya / Don'ts
1. Jeerna Shali (Old Rice) 2. Jangala Mamsa (meat from animals of arid or dry regions). 3. Triphala (mixture of Haritaki (<i>Terminalia chebula</i>), Bibhitaki (<i>Terminalia bellirica</i> or Baheda) and Amalaki (<i>Embolica officinalis</i> or Amla). 4. Madhu (Honey)	1. Ksheera vikarani (milk products), 2. Ikshu Vikarani (sugarcane products) 3. Matsya (Fish) 4. Anupa- Audaka Mamsa (Meat from aquatic or marsh-dwelling animals) 5. Naveena Madhya (Freshly prepared alcoholic beverage)

Pathya/ Do's	Apathya / Don'ts
5. <i>Mudga Yusha</i> (Green Gram Soup) 6. <i>Kulattha Yusha</i> (Horse Gram Soup) 7. <i>Ushnodaka</i> (Luke warm Water) 8. <i>Karavellaka Shaka</i> (Bitter Gourd Vegetable) 9. <i>Moolaka Yusha</i> (Radish Soup) 10. <i>Dadima Phala</i> (Pomegranate) 11. <i>Shigru Shaka</i> (Drumstick leaves) 12. <i>Moolaka Shaka</i> (Radish leafy vegetable) 13. <i>Kashaya Rasa</i> (Astringent Taste)	6. <i>Virudhahara</i> (incompatible food), 7. <i>Snigdha</i> (Oily foods), <i>Amla</i> (Sour Foods), <i>Madhura</i> (Sweets), <i>lavana rasa</i> (Saltish Foods) 8. <i>Guru Annapana</i> (heavy to digest food)
Vihara- Apathya 1. <i>Divaswapna</i> (Day Sleep) 2. <i>Poorva and Daksheena Disha Pavana</i> (Eastern and Southern directional winds) 3. <i>Atapa Sevana</i> (Sun Exposure) 4. <i>Vyavaya</i> (Sexual Activity) 5. <i>Snana</i> (Bathing)	

AT LEVEL 1- Solo Physician Clinic/ Health & Health Clinic/ PHC (Optimal Standard of treatment in situation where technology and resources are limited)

Clinical diagnosis: *Sheetpitta* /Urticaria is diagnosed after a complete medical history, psychiatric, triggering factors and physical examination. Some investigations, like CBC (Complete Blood Count), ESR (Erythrocyte Sedimentation Rate), CRP (C-Reactive Protein), Stool Examination, total IgE may also be done.

Management

1. *Nidana parivarjan*: Nidana Parivarjana is the primary line of treatment for *Sheetpitta*; therefore, it is advised to identify the causative factors and avoid them as much as possible
2. *Chikitsa*:

Internal Medications

Table 11: Medications for Level 1

S.No.	Drugs	Dosage form	Dose	Time	Duration	Adjuvants
1.	<i>Haridrakhandā</i>	Powder	3-5 Gms	BD (A/F)	15 days	Milk
2.	<i>Yavanyadi choornam</i>	Powder	3-5 Gms	BD (A/F)	15 days	Water
3.	<i>Sheetapitta bhanjana ras</i>	Tablet	200 mg	BD (A/F)	15 days	Honey
4.	<i>Sutasekhara rasa</i>	Tablet	300 mg	BD (A/F)	15 days	Honey
5.	<i>Gandhaka Rasayana</i>	Powder	250-500 mg	BD (A/F)	15 days	Milk
6.	<i>Duralabhadi Kashayam</i>	Decoction	25-50 ml	OD (E/S)	15 days	Warm water

S.No.	Drugs	Dosage form	Dose	Time	Duration	Adjuvants
7.	<i>Patola Katurohinyadi Kashayam</i> ⁶⁰	Decoction	25-50 ml	OD (E/S)	15 days	Warm water
8.	<i>Bilvadi Gutika</i> ⁶¹	Tablet	250-500 mg	BD (A/F)	15 days	Luke Water

b. Bahir Parimarjana Chikitsa

S.No.	Drugs	Dosage form	Dose	Time	Duration	Adjuvants
1	<i>Durvadya Taila</i> ⁶²	Taila	QS	As per requirement	15 days	-
2	<i>Brihat marichyadi tailam</i>	Taila	QS	As per requirement	15 days	-
3.	<i>Nimbadi tailam</i>	Taila	QS	As per requirement	15 days	-

FollowUp: In the first-level management of *Sheetapitta*, which primarily involves *Nidana Parivarjana* (avoiding causative factors), intake of shamanoushadhis and dietary regulation, the follow-up period is relatively short and focused on early symptom resolution and prevention of escalation.

Initial Phase (Days 1–7)

- Frequency: Every 3–5 days
- Purpose: Monitor response to initial interventions
- Focus: Reduction in itching (*Kandu*), swelling (*Shotha*), and redness (*Raga*)

Stabilization Phase (Weeks 2–4)

- Frequency: Weekly
- Purpose: Ensure sustained relief and prevent recurrence
- Focus: Evaluate digestion (*Agni*), skin condition, and adherence to *Pathya-Apathya* guidelines

Transition Criteria to Second-Level

If symptoms persist beyond 2–3 weeks or recur after initial relief or new symptoms like *Daha*, *Jwara*, or *Chhardi* appears, the patient may be referred to level 2.

Referral Criteria

- If symptoms cannot be controlled with regular treatment and even after avoidance of triggering factors.
- Patients suffering from angioedema.
- Substantial impact on their quality of life and activities of daily living.
- Evidence of an increase in severity/complications
- Diagnostic uncertainty.
- Uncontrolled comorbidities such as diabetes mellitus, hypertension etc.

- Urticaria with symptoms of anaphylaxis.
- Hereditary angioedema, physical urticaria not responding to treatment.

AT LEVEL 2: (CHC/Small hospitals (10-20 bedded hospitals with basic facilities such as routine investigations, X-ray)

Clinical Diagnosis: Same as Level 1

Non-responding cases of mild to moderate severity and severe cases shall be referred to level 2 and 3. The case referred from Level 1, or a fresh case must be evaluated thoroughly for any complications. Identification of patient specific etiopathological factors (nidana), dosha involvement (Initial kapha-vata dominance may start showing signs of Pitta aggravation) and assessment of Rogibala is needed before initiation of treatment.

Investigations: The diagnosis would be primarily clinical. Investigations may be necessary (if not done at primary level) to investigate complications or exclude other differential diagnoses as follows:

- Infection screens
- Thyroid Panels

Management

The second level management of Sheetapitta includes Shamana as well as Shodhana Chikitsa—a purificatory approach used when symptoms are chronic, recurrent, or associated with Bahudosha Avastha (excessive doshic aggravation).

Purification/other procedures

1. Vamana (Therapeutic Emesis)

- Decoctions of *Patola*, *Nimba*, *Vaca* used for emesis
- Eliminates *Kapha* and *Ama* from the *Amasaya*
- Indicated when itching and swelling are predominant

2. Virechana (Purgation Therapy)

- *Triphala Churna*, *Trivrit Avaleha*, *Navakarshika Kashaya*
- Targets *Pitta* and *Rakta Dushti*
- Especially useful when burning sensation (*Daha*) and redness (*Raga*) are prominent

Recommended Follow-Up Period

Immediate Post-Shodhana Phase (Days 1–7)

- Frequency: Daily or alternate days
- Focus: Monitor *Samyak Lakshana* (signs of proper purification), bowel movements, hydration, and vitals
- Care: Begin *Samsarjana Krama* (gradual diet restoration) with *Manda*, *Peya*, *Vilepi*

Recovery Phase (Weeks 2–4)

- Frequency: Weekly
- Focus: Assess reduction in symptoms like *Kandu*, *Daha*, *Shotha*
- Care: Introduce *Shamana Chikitsa* if needed, continue dietary regulation

Maintenance Phase (Weeks 5–12)

- Frequency: Biweekly to monthly
- Focus: Prevent recurrence, monitor *Agni*, *Bala*, and skin health
- Care: Use Rasayana therapy (e.g. *Haridrakhand*, *Guduchi*, *Triphala*) to rebuild immunity

Referral Criteria

- Same as mentioned earlier at Level 1
- Failure to respond to initial medical management/ Acute exacerbation of the disease
- Hereditary angioedema
- Physical urticaria not responding to therapy
- Any other life-threatening complications
- Clinical diagnosis referral from second-level to third-level is considered when symptoms intensify or become chronic, requiring deeper detoxification.

AT LEVEL 3: (Ayush hospitals attached with teaching Institution, DistrictLevel/ Integrated/ State Ayush Hospitals)

Clinical Diagnosis: Same as Levels 1 & 2.

Confirm diagnosis and severity with the help of following investigations.

- Screening for neutrophil rich infiltrates in skin biopsy, performing gene mutation analysis for hereditary periodic fever syndromes.
- Autologous Serum Skin Test (ASST)
- In cases of suspected hereditary angioedema (HAE), test for complement C4 levels, If mean wheal duration >24 hours, perform biopsy of skin lesion to assess for signs of urticarial vasculitis.
- Complement activity tests.
- Anti-nuclear antibody, rheumatoid factor, and/or anti-citrullinated protein.
- Thyroid autoantibodies to TSH receptor, thyroglobulin, thyroid peroxidase and sodium/iodine symporter.
- Biopsy to be done when there is doubt regarding the diagnosis (lesions persisting beyond 24 hrs, non-blanchable, fever, joint pains etc.)
- This level is applied when the disease is chronic or relapsing and there is significant doshic involvement (especially Pitta and Rakta)

Management

- The third-level management of *Sheetapitta* includes raktamoksha along with other sodhana therapies.
- Medical management with the following regimes can be given if there is pitha involvement.

त्रिफलामधुयुक्तं चूर्णं पित्तहरं परम्। नवकार्षिकगुग्गुलुं च शीतपित्ते प्रशस्यते॥

1. Triphala + honey: *Pitta hara* and *doshasamaka*.
2. *Navakarshika Guggulu*

Table 12: Internal Medications for Level 3

S. No.	Drugs	Dose form	Dose	Time	Duration	Adjuvants
1	<i>Haridrakhanda</i>	Powder	5-10 gms	After food	Two times a day	Luke warm Water
2	<i>Durva, Haridra kalka lepa</i> ⁶³	<i>Kalka</i>	Sufficient		Two times a day	
3.	<i>Seetapitta bhanjan ras</i>	Tablet	125 mg	After food	Two times a day	Honey
4.	<i>Laghumalini Vasanta Rasa</i>	Tablet	125 mg-250mg	After food	Two times a day	
5.	<i>Laghu Sutashekhara Rasa</i>	Tablet	250mg-500mg	After food	Two times a day	
6.	<i>Ardra swarasa</i>	<i>Swarasa</i>	15-24 ml	After food	Two times a day	<i>Purana guda</i>

Purification/other procedures

- Vamana and Virechana therapies as mentioned in level 1 and 2.
- Raktamokshana (Bloodletting)
 - *Siravyadha* or *Jalaukavacharana* (leech therapy)
 - Applied when symptoms are localized and severe
 - Helps purify *Rakta Dhatu* and reduce inflammation

Follow Up**Immediate Post-Shodhana Phase (Days 1–7)**

- Frequency: Daily or alternate days
- Focus: Monitor *Samyak Lakshana* (signs of proper purification), bowel movements, hydration, and vitals
- Care: Begin *samsarjana krama* (gradual diet restoration) with *Manda, Peya, Vilepi*

Recovery Phase (Weeks 2–4)

- Frequency: Weekly
- Focus: Assess reduction in symptoms like *Kandu, Daha, Shotha*
- Care: Introduce *Shamana Chikitsa* if needed, continue dietary regulation

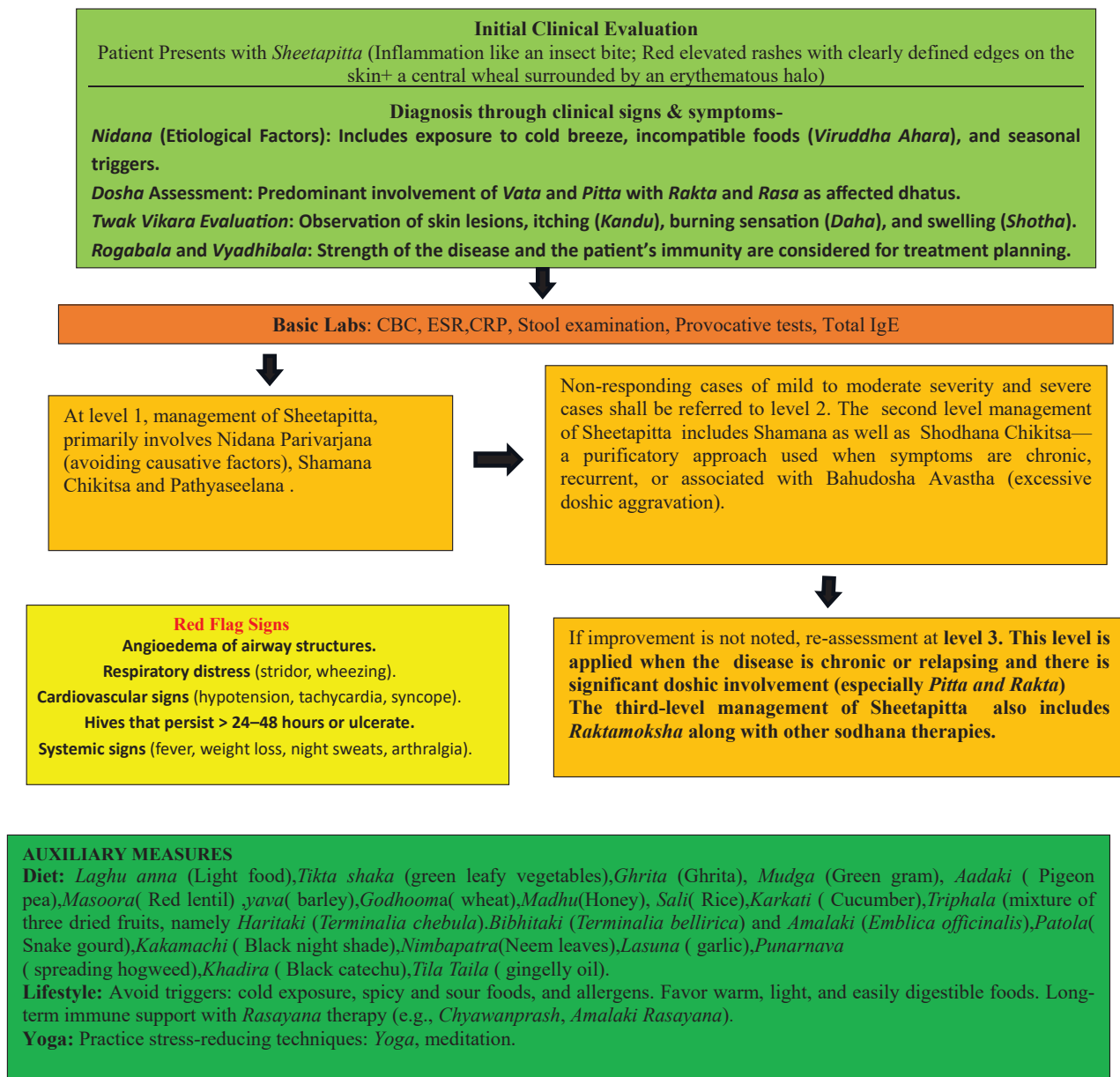
Maintenance Phase (Weeks 5–12)

- Frequency: Biweekly to monthly
- Focus: Prevent recurrence, monitor *Agni, Bala*, and skin health
- Care: Use Rasayana therapy (e.g., *Haridrakhanda, Guduchi, Triphala*) to build immunity

Referral Criteria:

- Same as mentioned earlier at Level 1 &2
- Other modalities can be considered depending on the case.

ALGORITHM OF TREATMENT PROCESS FOR SHEETAPITTA (URTICARIA)



REFERENCES

1. Sardana K, Agarwal P. Urticaria and Reactive Erythema Textbook of Dermatology and Sexually Transmitted Diseases. 3rd Edition .CBS Publishers & Distributors Private Limited; New Delhi 2025. Ch 14; 197-205.
2. Zuberbier T, Aberer W, Asero R, et al. Urticaria and angioedema: pathophysiology and classification. Clin Exp Dermatol. 2012;37(7):774–82.
3. Murthy Srikantha K R: Madhava Nidanam : Chaukhambha Orientalia Varanasi, 2009; Chapter 50/3-5, pp165.
4. Darlenski R, Kazandjieva J, Zuberbier T, et al. URTICARIA as a systemic disease. Clin Dermatol. 2014;32:420–3. doi: 10.1016/j.clindermatol.2013.11.009
5. Sánchez-Borges M, Asero R, Ansotegui IJ, et al. WAO Scientific and Clinical Issues Council. Diagnosis and treatment of urticaria and angioedema: a worldwide perspective. World Allergy Organ J. 2012;5:125–47. doi: 10.1097/WOX.0b013e3182758d6c
6. Godse K, Rajagopalan M, Girdhar M, et al. Position statement for the use of omalizumab in the management of chronic spontaneous urticaria in Indian patients. Indian Dermatol Online J. 2016;7(1):6–11.
7. Narang T, Srinivas CR, Malhotra S, et al. Clinico epidemiological features of chronic urticaria in children: a retrospective analysis of 296 children from a tertiary care institute in Northern India. Indian J Dermatol Venereol Leprol. 2018;84(5):575–82.
8. Tripathi B.: Charka Samhita Sutrasthan: published by Chaukhambha Surbharti Prakashana, Varanasi, 2016; Chapter 23/3-5, pp421.
9. Murthy Srikantha K R: Madhava Nidanam: Chaukhambha Orientalia Varanasi, 2009; Chapter 50/6, pp165.
10. Grattan CE, Sabroe RA, Greaves MW. Chronic urticaria. J Am Acad Dermatol. 2002 May;46(5):645–57; quiz 657–60. doi: 10.1067/mjd.2002.122759. PMID: 12004303.
11. Zuberbier T, Aberer W, Asero R, et al. The EAACI/GA²LEN/EDF/WAO guideline for the definition, classification, diagnosis and management of urticaria: the 2013 revision and update. Allergy. 2014;69(7):868–887.
12. Kaplan AP, Greaves M. Chronic urticaria in adults: state-of-the-art in the new millennium. J Allergy Clin Immunol. 2015; [PMCID: PMC4323701].
13. Greaves MW, Kaplan AP. Pathology and classification of urticaria. Clin Exp Allergy. 2009;39(6):777–787.
14. Zuberbier T, Abdul Latiff AH, Abuzakouk M, et al. The international EAACI/GA²LEN/EuroGuiDerm/APAAACI guideline for the definition, classification, diagnosis, and management of urticaria. Allergy. 2022 Mar;77(3):734–66.
15. Papa CM. Skin. In: Walker HK, Hall WD, Hurst JW, editors. Clinical Methods: The History, Physical, and Laboratory Examinations. 3rd edition. Boston: Butterworths; 1990. Chapter 105. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK208/>
16. Pozderac I, Lugović-Mihić L, Artuković M, Stipić-Marković A, Kuna M, Ferček I. Chronic inducible urticaria: classification and prominent features of physical and non-physical types. Acta Dermatovenereol Alp Pannonica Adriat. 2020 Sep;29(3):141–148. PMID: 32975301.
17. Maurer M, Weller K, Bindslev-Jensen C, et al. Unmet clinical needs in chronic spontaneous urticaria. A GA²LEN task force report. Allergy. 2011;66(3):317–30.
18. Kayiran MA, Akdeniz N. Diagnosis and treatment of urticaria in primary care. North Clin Istanbul. 2019 Feb 14;6(1):93–99. doi: 10.14744/nci.2018.75010. PMID: 31180381; PMCID: PMC6526977
19. Murthy Srikantha R: Madhava Nidanam : Chaukhambha Orientalia Varanasi, 2009; Chapter 50/2, pp165.
20. Murthy Srikantha R: Madhava Nidanam : Chaukhambha Orientalia Varanasi, 2009; Chapter 50/1, pp165.
21. Agnivesa. Caraka Samhita, refined and annotated by Caraka and redacted by Drdhabala. Translated by Sharma PV. 7th ed. Vol. II. 2005. p. 342

22. Schettini N, Corazza M, Schenetti C, et al. Urticaria: A Narrative Overview of Differential Diagnosis. *Biomedicines*. 2023 Apr 4;11(4):1096. doi: 10.3390/biomedicines11041096. PMID: 37189714; PMCID: PMC10136346.
23. Davis MDP, van der Hilst JCH. Mimickers of Urticaria: Urticarial Vasculitis and Autoinflammatory Diseases. *J Allergy Clin Immunol Pract*. 2018 Jul-Aug;6(4):1162-1170. doi: 10.1016/j.jaip.2018.05.006. Epub 2018 Jun 2. PMID: 29871797
24. Gupta A, Vagbhata, Astanga Hridayam Edited With The Vidyotini Hindi Commentary Chaukhambha Prakashana, Varanasi. 2012
25. Tripathy I, Dwivedi R. Chakradatta Samhita. Udarda-Kotha-Sheetapitta Chikitsa, Chapter 51, verses 1–13. Varanasi: Chaukhambha Sanskrit Sansthan; p. 293–294.
26. Chuneekar KC, Pandey GS. Bhavaprakasha Samhita. Sheetapitta-Udarda-Kotha Chikitsa, Chapter 55, Part II. Varanasi: Chaukhambha Sanskrit Sansthan; p. 544.
27. Karstarli Bakay OS, Demir B, Cicek D, et al. In chronic spontaneous urticaria, IgE and C-reactive protein are linked to distinct microRNAs and interleukin-31. *Clin Transl Allergy*. 2023 Aug;13(8):e12290. doi: 10.1002/ctt2.12290. PMID: 37632245; PMCID: PMC10405150.
28. Kulthanan K, Tanwandee T, Chularojanamontri L, et al. Yellow Urticaria: A Systematic Review. *J Asthma Allergy*. 2023 Sep 8;16:973-978. doi: 10.2147/JAA.S424360. PMID: 37706012; PMCID: PMC10497042.
29. Viñas M, Postigo I, Suñén E, et al. Urticaria and silent parasitism by Ascaridoidea: Component-resolved diagnosis reinforces the significance of this association. *PLoS Negl Trop Dis*. 2020 Apr 3;14(4):e0008177. doi: 10.1371/journal.pntd.0008177. PMID: 32243436; PMCID: PMC7170265.
30. Lote S, Gupta SB, Poulouse D, et al. Role of the Skin Prick Test in Urticaria Patients. *Cureus*. 2022 Feb 1;14(2):e21818. doi: 10.7759/cureus.21818. PMID: 35261837; PMCID: PMC8894145.
31. Ferrer M, Nuñez-Córdoba JM, Luquin E, et al. Serum total tryptase levels are increased in patients with active URTICARIA. *Clin Exp Allergy*. 2010 Dec;40(12):1760-6. doi: 10.1111/j.1365-2222.2010.03582.x. Epub 2010 Aug 16. PMID: 20718781.
32. Yoshimasu T, Furukawa F. Eradication therapy for urticaria with high titers of anti H. pylori IgG antibody. *Allergol Int*. 2014 Mar;63(1):37-40. doi: 10.2332/allergolint.13-OA-0580. Epub 2013 Nov 25. PMID: 24270226.
33. Aldehaim AY, Alnegheimish NA, Fathaddin AA. Refractory Urticaria with Raised Antistreptolysin O (ASO) Titer: An Intriguing Case of Adult-Onset Still's Disease. *Am J Case Rep*. 2020 Nov 5;21:e927936. doi: 10.12659/AJCR.927936. PMID: 33149107; PMCID: PMC7649744.
34. Kolli H, Ali MJ, Campoverde Reyes KJ, Lau DT. Case of cryoglobulinaemia associated with chronic hepatitis B. *BMJ Case Rep*. 2022 May 27;15(5):e249630. doi: 10.1136/bcr-2022-249630. PMID: 35623656; PMCID: PMC9150156.
35. Oizumi R, Sugimoto Y, Aibara H The Potential of Exercise on lifestyle and Skin Function: Narrative Review *JMIR Dermatol* 2024; e51962 doi: 10.2196/51962 PMID: 38483460 PMCID: 10979338
36. Jaros J, Shi VY, Katta R. Diet and URTICARIA: Dietary Modification as a Treatment Strategy. *Dermatol Pract Concept*. 2019 Dec 31;10(1):e2020004. doi: 10.5826/dpc.1001a04. PMID: 31921491; PMCID: PMC6936629.
37. Govindaraj R, Karmani S, Varambally S, Gangadhar BN. Yoga and physical exercise - a review and comparison. *Int Rev Psychiatry*. 2016 Jun;28(3):242-53. doi: 10.3109/09540261.2016.1160878. Epub 2016 Apr 4. PMID: 27044898.
38. Tripathy I, Dwivedi R. Chakradatta Samhita. Udarda-Kotha-Sheetapitta Chikitsa, Chapter 51, verses 1–13. Varanasi: Chaukhambha Sanskrit Sansthan; p. 293–294.
39. Chuneekar KC, Pandey GS. Bhavaprakasha Samhita. Sheetapitta-Udarda-Kotha Chikitsa, Chapter 55, Part II. Varanasi: Chaukhambha Sanskrit Sansthan; p. 544.
40. Vaidya Lakshmi patishastri, Yogaratnakar – Hindi Translation, Chaukhambha Prakashana, Varanasi. Uttardha, Sheetapittadinam Chikitsa prakarana verse 14, pp.236

41. Mishra Brahmashankara. Bhaishajyaratnavali of Govinda Dasji, Vol. III, Chaukhamba Sanskrit Bhawan, Varanasi, 2006. Kustha Chikitsa 55/12) pp105.
42. Anonymous, The Ayurvedic Formulary of India, Part 2. Ed. 1st, Govt. of India, Ministry of Health Family Welfare, Department of I.S.M. & H., New Delhi, 2010 29
43. Anonymous, The Ayurvedic Formulary of India, Part 2. Ed. 1st, Govt. of India, Ministry of Health Family Welfare, Department of I.S.M. & H., New Delhi, 2011 77
44. Anonymous, The Ayurvedic Formulary of India, Part I, Second Revised Edition Govt. of India, Ministry of Health Family Welfare, Department of I.S.M. & H., New Delhi, 2003 – 7:15 110
45. Anonymous, The Ayurvedic Formulary of India, Part 1. Ed. 1st, Govt. of India, Ministry of Health Family Welfare, Department of I.S.M. & H., New Delhi, 2010 41 e book version
46. Anonymous, The Ayurvedic Formulary of India, Part 2. Ed. 1st, Govt. of India, Ministry of Health Family Welfare, Department of I.S.M. & H., New Delhi, 2011 66 Hindi version
47. Kashinath Shastri. Rasatarangini. 1st ed. Varanasi: Motilal Banarsidass; 2012. Chapter 22, sloka 116–118. p.566.
58. Anonymous, The Ayurvedic Formulary of India, Part 1. 2nd Revised Edition Govt. of India, Ministry of Health Family Welfare, Department of I.S.M. & H., New Delhi, 2003 245
49. Anonymous, The Ayurvedic Formulary of India, Part 1. 2nd Revised Edition Govt. of India, Ministry of Health Family Welfare, Department of I.S.M. & H., New Delhi, 2003 238
50. Indradeva Tripathi. Gada Nigraha with Vidyotini Hindi commentary, Chaukhamba Sanskrit Santhan, Varanasi. 2nd Vol Ch 27
51. Anonymous, The Ayurvedic Formulary of India, Part II. Vol II Ed. 1st, Govt. of India, Ministry of Health Family Welfare, Department of I.S.M. & H., New Delhi, 2010 63
52. Anonymous, The Ayurvedic Formulary of India, Part 1. 2nd Revised Edition Govt. of India, Ministry of Health Family Welfare, Department of I.S.M. & H., New Delhi, 2003 278
53. Gopal Krishan. Rastantrasaar va Sidhaproyag Samgrah, reprint edition. Rajasthan; Krishan Gopal Ayurved Bhawan, 2013; Vol-1. 225-228
54. Anonymous, The Ayurvedic Formulary of India, Part 1. 2nd Revised Edition Govt. of India, Ministry of Health Family Welfare, Department of I.S.M. & H., New Delhi, 2003 258
55. Hariprapannaji. Rasayogasagara. Vol. 2. Varanasi: Choukhamba Krishnadas Academy; 1998. p.357.
56. Vaidya Yadavaji Trikamji Acharya, Rasamritam, English translation by Dr. Damodar Joshi and Dr. G. Prabhakar Rao, 2nd Edition, Varanasi, Chaukhambha Sanskrit Bhawan, 2003, 5th Chapter, Shloka 22-24, page-176
57. Mishra Brahmashankara. Bhaishajyaratnavali of Govinda Dasji, Vol. III, Chaukhamba Sanskrit Bhawan, Varanasi, 2006. Jvara Chikitsa 5, pp339.
58. Mishra Brahmashankara. Bhaishajyaratnavali of Govinda Dasji, Vol. III, Chaukhamba Sanskrit Bhawan, Varanasi, 2006. Kustha Chikitsa 54/312-314) pp93.
59. Mishra Brahmashankara. Bhaishajyaratnavali of Govinda Dasji, Vol. III, Chaukhamba Sanskrit Bhawan, Varanasi, 2006. Visarpa Chikitsa 57/26) pp142.
60. Sena V. Pathyapathya Vinischaya. In: Kishore P, Padi MM, editors. New Delhi: Central Council for Research in Ayurveda & Siddha; 1999. p. 82–3.
61. Mishra Brahmashankara. Bhaishajyaratnavali of Govinda Dasji, Vol. III, Chaukhamba Sanskrit Bhawan, Varanasi, 2006. Grahani Chikitsa 8/341-364, pp532.
62. Gupta A, Vagbhata, Astanga Hridayam Edited With the Vidyotini Hindi Commentary Chaukhambha Prakashana, Varanasi. 2012, Uttarasthana, 36/84-85.
63. Mishra Brahmashankara. Bhaishajyaratnavali of Govinda Dasji, Vol. III, Chaukhamba Sanskrit Bhawan, Varanasi, 2006. Kustha Chikitsa 54/281, pp87.

VITILIGO

(श्वित्र)

VITILIGO

(Shvitra)

ICD 10: L80

ICD 11: EA80.0

ICD 11TM 2 code – SN4D

National Ayurveda Morbidity Code

ED-5 श्वित्रः

ED-5.1 वातिक-श्वित्रः

ED-5.2 पैत्तिक-श्वित्रः/किलासः

ED-5.3 कफजश्वित्रः/किलासः

ED-5.4 रक्तजश्वित्रः-दारुणः

ED-5.5 मांसजश्वित्रः-चारुण

ED-5.6 मेदोजश्वित्रः

ED-5.7 असाध्यकिलास

CASE DEFINITION:^{1, 2, 3, 4}

Vitiligo is a chronic, acquired autoimmune skin disorder characterized by well-demarcated hypopigmented or depigmented macules and patches resulting from the selective destruction of melanocytes in the epidermis. It may affect the skin, mucous membranes, and hair follicles, and can be associated with systemic autoimmune conditions such as thyroiditis, uveitis, and sensorineural hearing loss.

Before addressing vitiligo, it is important to understand the basic target cell that is affected by the disease and for that a basic overview of the melanin pathway is essential. Melanin is formed from the essential amino acids tyrosine and phenylalanine through a series of enzymatic steps in the liver and skin. Tyrosine is formed in the liver by the hydroxylation of the essential amino acid phenylalanine under the influence of phenylalanine hydroxylase which is in turn converted to DOPA and further into the pigment under the influence of tyrosinase enzyme (Fig. 1). The melanin is made within the melanosomes which are of two types —eumelanosomes (containing eumelanin), or pheomelanosomes (containing pheomelanin). These melanosomes pass into the dendritic processes of the melanocyte to be further transferred into neighboring keratinocytes.

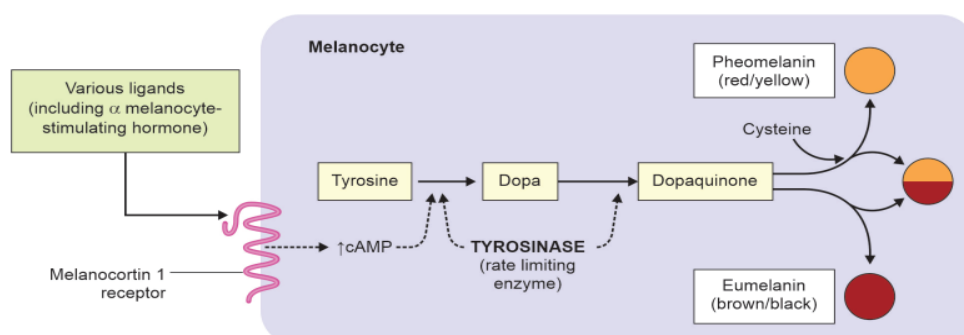


Fig 1 Pathway of Melanogenesis

An overview of the disorders is given in the figure below and it must be noted and explicitly emphasized that it's only the disorders that have a loss of melanocytes can cause vitiligo and this contrast from disorders that cause decrease in melanin. (Fig 2)

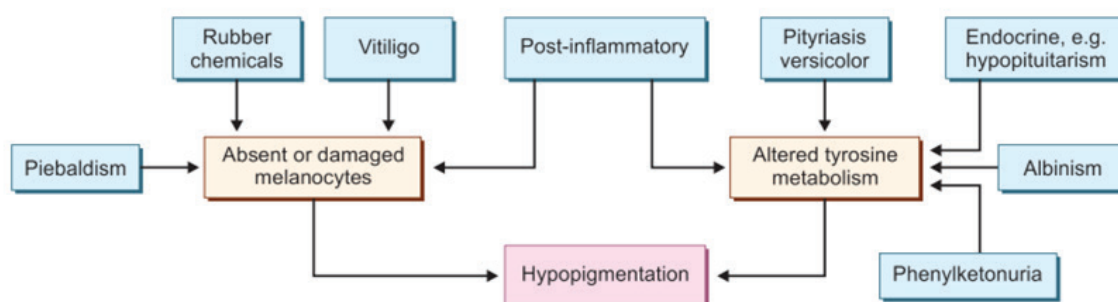


Fig 2: Overview of hypopigmentation disorders based on the main pathogenetic steps

Case Definition in Ayurveda:

Shvitra is characterized by whitish, de-pigmented areas without exudation and non-infectious patches on the skin (अपरिस्त्राविश्वेतवर्णमंडला)⁵. The term *Shvitra* is a combination of *Shweta* and *Rak*.

Shweta means whiteness, and *Rak* is a suffix of '*Shweta*' *Dhātu*. The *Nirukti* of the term reveals white colour or changes toward white colour

Synonyms: *Kilasa*, *Shweta*, *Shouklya*, *Aruna*, and *Daruna*.

INTRODUCTION (Incidence/Prevalence, Morbidity/Mortality/Risk Factors)^{7, 8, 9, 10}

- Vitiligo, a common depigmenting skin disorder, has an estimated prevalence of 0.5–2% of the population worldwide. The prevalence of vitiligo is quite variable around the world, being more frequent in Africa (0.4%), Europe (0.4%), and Oceania (1.2%), than in North America (0.2%) and Asia (0.1%).
- In India, the reported prevalence of vitiligo ranges from approximately 0.5% to 2.5%, with some regional studies indicating even higher figures in specific populations.
- There is no difference in prevalence between races or genders. Females typically acquire the disease earlier than males. Onset may occur at any age, although about half of patients will have vitiligo by 20 years of age.
- It is broadly classified into nonsegmental vitiligo (NSV) and segmental (SV), with NSV being the most common form.
- Vitiligo significantly impacts patient's psychological and social well-being.

In Ayurveda, nearly all skin conditions are classified generally as sub-varieties of *Kustharoga* and come under the general categories of "*Kustharogadhikara*" while a few are also described under "*Kshudrarogadhikara*". However, among the different types of *Kustha* that are described in *Brihatrayi*, *Shvitra* has not been named as a sub type. But due to the *Vaisishthaya* (specificity) of the presentation, *Shvitra* is discussed separately in the *Kustha* chapter, which gives it particular attention.¹¹

Updates in pathogenesis and its relevance^{12, 13, 14}

Various theories have been propounded for the causation of vitiligo which are listed in the box below

1. Genetic predisposition
2. Autoimmune destruction of melanocytes.
3. Neural pathways (explains the stress and segmental type)
4. Metabolic abnormalities & oxidative stress - Accumulation of toxic metabolites and oxidants that damage melanocytes.
5. Selfdestruction of melanocytes (autocytodestructive)

The effect of these factors is largely confined to autoimmune damage which has a close relationship of specific immune cells and cytokines which are important as many new drugs have been approved to target the specific cytokines which helps to prevent “by-stander cells” and also helps to ensure targeted therapy

The autoimmune theory revolves around the role of CD8+ T-cells and T_{RM} cells. The former is a cell that causes cell damage and the latter is a memory cell that leads to relapses. In fact, formal studies have shown that biopsies of vitiligo show melanocyte destruction with presence of melanocyte specific CD8+T-cells as compared to controls. These T-cells result in cell damage apoptosis via the release of IFN-γ which mediates its action via JAK/STAT pathway.

Etiological Factors:¹⁵

The etiological factors of *Shvitra* include the factors responsible for the causation of the *Samanya Kustha*. They can be classified as

Aaharaja (Dietary factors):

- Intake of incompatible food combinations (*Virudha Ahara*) such as milk with fish
- Intake of unctuous and heavy-to-digest drinks (*Snigdha-Guru Pana*)
- Simultaneous intake of hot and cold potency foods and irregular fasting
- Overeating, eating uncooked food, or eating before previous meal is digested
- Excessive intake of freshly harvested grains, curd, fish, salt, and sour substances
- Excessive intake of black gram (*Masha*), radish (*Mulaka*), sesame (*Tila*), and jaggery

Viharaja (Lifestyle factors):

- Suppression of natural urges like vomiting
- Excessive physical exercise in hot weather or after a heavy meal
- Use of cold water immediately after exposure to scorching sun, exertion, or during a frightening situation
- Sleeping during daytime
- Improper administration of Panchakarma therapies

Samprapti (Pathogenesis)

The vitiated *Doshas* aggravated as a result of the indulgence in regular use of aggravating dietary and lifestyle factors and those particularly prone, as a result of specific *Nidana*, lead to the *Sanga* (obstruction) of the *Rasavaha and Raktavahasrotasa*. The aggravated *Doshas* vitiate the specific *dhatu* and result in the specific discoloration of the skin i.e. reddish, coppery or whitish, depending upon the *Dhatu* involved. The classics define *Tritiya Twacha* (the third layer of skin, as per *Acharya Charaka*) or *Tamra* (the fourth layer of the skin, as per *Acharya Sushruta*) to be the *Adhithana* (site of occurrence) of the *Kilasa*.¹⁶ That is why the external as well as internal medication is required for *Shvitra* treatment.

CLINICAL PRESENTATION^{17, 18}

Vitiligo is clinically defined by the appearance of well-demarcated hypopigmented or depigmented macules and patches, resulting from the selective loss of functional melanocytes. These lesions are typically asymptomatic, though mild pruritus may occasionally be reported. In individuals with darker skin tones, the contrast between affected and unaffected areas is more pronounced. Lesion margins may exhibit intermediate hypopigmented zones, forming characteristic patterns such as trichrome or hypochromic vitiligo. Poliosi- depigmentation of hair within affected areas, often presenting as white locks on the scalp—is considered an indicator of deeper melanocyte involvement. Due to the absence of melanin, depigmented regions are more vulnerable to solar erythema. In cases of universal vitiligo, widespread depigmentation is observed. Additionally, lesions may develop at sites of skin trauma, a phenomenon known as koebnerization.

An international consensus in 2011 standardized the classification of vitiligo, distinguishing segmental vitiligo (SV) from all other forms, which were grouped under non-segmental vitiligo (NSV). The consensus also introduced mixed vitiligo—coexistence of SV and NSV in a single patient—as a clinically distinct subgroup, categorized under NSV due to similar pathophysiological behaviour.

Clinical Subtypes of Vitiligo

Table no. 1: Expanded Classification¹⁹ (Adapted from Ezzedine et al.)

Type of Vitiligo	Subtypes
1. Non-Segmental Vitiligo (NSV): Non-Segmental Vitiligo (NSV): The most prevalent form, presenting as bilaterally symmetrical depigmented patches. Commonly affected sites include periorificial regions (around the mouth, eyes), dorsal fingers, and intertriginous zones. The distribution often corresponds to areas of repetitive mechanical trauma, reflecting the Koebner phenomenon.	- Focal¹ - Mucosal - Acrofacial - Generalized - Universal - Rare variants (e.g., leukoderma punctata, hypochromic vitiligo, follicular vitiligo)
2. Segmental Vitiligo (SV): Segmental Vitiligo (SV): Characterized by unilateral, localized depigmentation following a dermatomal pattern. It typically has an early onset, rapid stabilization, and limited progression, and is often resistant to conventional therapies.	- Focal¹ - Unisegmental - Bi- or multisegmental

Type of Vitiligo	Subtypes
3. Mixed Vitiligo: Mixed Vitiligo involves the simultaneous presence of segmental and non-segmental lesions in the same individual. It may show asymmetric distribution and is important to recognize for therapeutic and prognostic considerations.	- Coexisting SV and NSV - Further classified by SV severity
4. Unclassified Vitiligo: Unclassified Vitiligo includes atypical or early-stage cases that do not fit clearly into the above categories. Examples include focal lesions at onset, asymmetrical multifocal patches, or isolated mucosal involvement.	- Focal onset - Multifocal asymmetrical NSV - Isolated mucosal involvement

¹Focal vitiligo may appear in both NSV and SV and is classified based on disease progression.

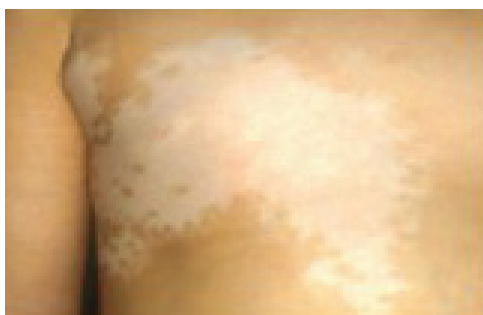


Figure 3- Segmental vitiligo, unilateral depigmented patches over the chest and arm, characteristic of segmental vitiligo with dermatomal distribution

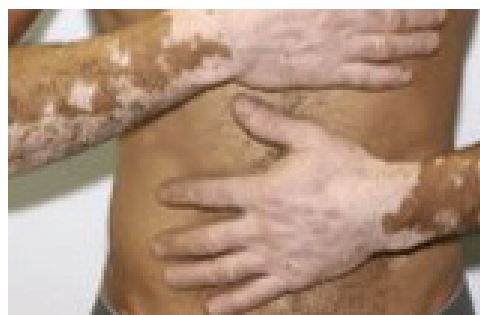


Figure 4- Acrofacial Vitiligo (non-segmental type), depigmented macules limited periorificial areas, distal extremities and/or face

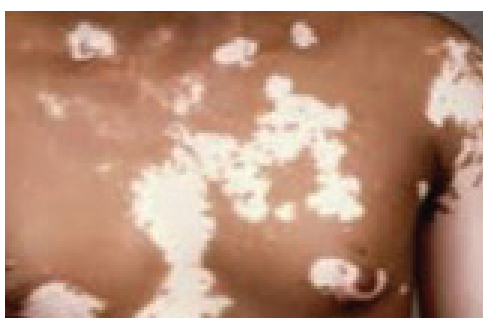


Figure 5- Generalized vitiligo, bilateral, often symmetrical, depigmented macules or patches

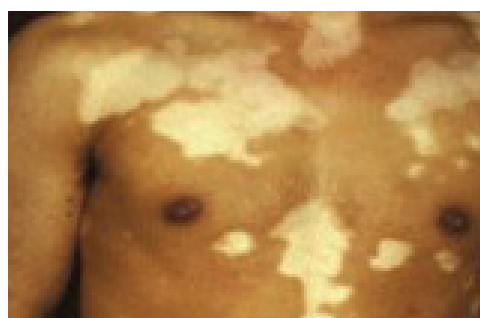


Figure 6- Trichrome Vitiligo, multiple depigmented macules on the chest and shoulders, showing a trichrome pattern.

Clinical Presentation as per Ayurveda: The hallmark of *Shvitra* is presentation of the depigmented patches on the skin with the colour of the lesion differentiating the *Dhatu dushti* (vitiation of the tissues involved). E.g. *Rakta varṇa* (red colored lesions) in *Rakta dhātudushti*, *Tāmravarṇa* (copper-coloured lesions) in *Māṁsadhātudushti*, and **Śvetavarṇa** (whitish) due to *Medo dhātudushti*.²⁰

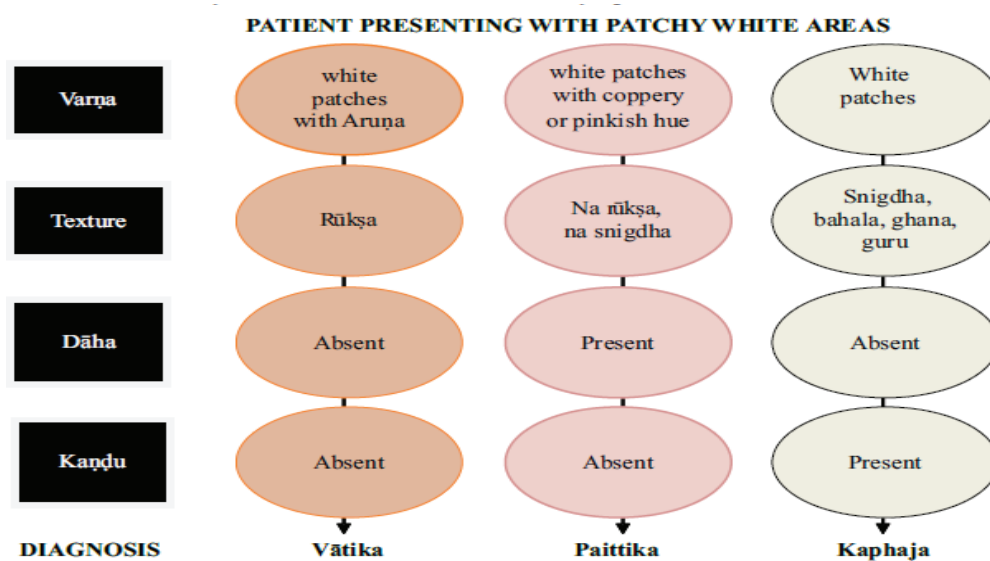
CLINICAL EXAMINATION ^{21, 22}

Important points of history that are helpful in the diagnosis of vitiligo include:

- Age at onset of lesions
- Factors or events that may cause the onset of vitiligo
- Symptoms associated with the lesions
- Progression or spread of lesions
- Changes observed in lesions over time
- Presence of concomitant diseases
- Current medications
- Occupational history/ exposure to chemicals or radiation
- Family history of vitiligo and autoimmune diseases

Physical Examination of vitiligo will include these features:

- The most affected areas include the face, neck, forearms, dorsal hands, fingers, feet, and scalp. On the face, lesions typically show a periocular or perioral distribution.
- In cases of generalized involvement, lesions may also be seen on the areolae, nipples, and genital region. Sites frequently exposed to friction or trauma- such as bony prominences (elbows, knees) are often involved, which may reflect the Koebner phenomenon, observed in 20–60% of vitiligo cases.
- Vitiligo manifests as depigmented macules or patches with a convex border without signs of inflammation with normal skin around.
- Macules are milky-white in color, well-demarcated with any shape
- Ranges in size from a few millimeters to a few centimeters.
- Signs of other associated diseases may also be present like goiter, anemia, generalized wasting, premature grey hairs, alopecia areata and weakness, etc
- Leukotrichia, or depigmentation of body hair within vitiliginous macules, may be noted during examination and is considered a marker of poor response to repigmentation therapies, as spontaneous recovery of pigment in affected hair is uncommon.



Ayurvedic Clinical Examination

DIFFERENTIAL DIAGNOSIS^{23, 24, 25, 26}

As has been depicted in the figures above the loss of melanocytes is not seen in many disorders and chemical leukoderma and piebaldism are the only two disorders that can be mistaken for vitiligo. Rests of the disorders are hypopigmented and not depigmented. Thus, the clinician should distinguish between these two entities.

Table no. 2: The following diseases must be considered in differential diagnosis of Vitiligo:

Category	Condition	Differential Features
Chemically Induced Leukoderma	Occupational leukoderma	- Local loss of skin pigmentation resulting in white patches. - Depigmentation due to repeated exposure to phenols, catechols, PPD, hand rubs & rubber chemicals. - Affects contact areas.
	Drug-induced depigmentation	- Topical (e.g., corticosteroids, imiquimod) or systemic drugs (e.g., chloroquine); typically, localized and reversible. - Are Never depigmented hence are not a close differential of vitiligo
Genetic Syndromes	Hypomelanosis of Ito	- Whorled, streaked hypopigmentation along Blaschko's lines; associated with neurologic or skeletal abnormalities. - Congenital and hence easily differentiated as vitiligo is rarely congenital
	Piebaldism	- Stable congenital leukoderma with white forelock and depigmented patches. - Melanocyte absence. ➤ Arranged symmetrically on limbs, trunk and central part of the face, especially the chin ➤ Typically, patients have pigmented islands within white patches.
		- Waardenburg Syndrome - Depigmentation + sensorineural deafness, often a white forelock.
	Tuberous sclerosis	- Hypopigmented ash-leaf macules; may have seizures and other systemic signs. - Congenital and genetic disorder
	Griscelli Syndrome	- Silvery-grey hair, partial albinism, immune defects. - Congenital and genetic disorder
	Hermansky–Pudlak Syndrome	Oculocutaneous albinism, bleeding tendency, pulmonary fibrosis.
	Menkes Syndrome	- X-linked disorder of copper metabolism; - Hypopigmentation, kinky hair, - Neurological symptoms.

Category	Condition	Differential Features
	Ziprkowski-Margolis Syndrome	Rare; features include pigmentary anomalies and developmental delays.
Post-inflammatory Hypopigmentation	Pityriasis alba	- Mild, scaly, ill-defined hypopigmented patches, - Mostly in children; often on the face.
	Atopic dermatitis / contact dermatitis	- Hypopigmented areas after eczema resolves; - Irregular margins.
	Lichen planus	White patches with violaceous border
	Psoriasis	Hypopigmented post-inflammatory areas after lesion resolution.
	Toxic drug reactions	Hypopigmentation post-drug rash
	Post-traumatic scars	Depigmented areas over healed wounds or burns.
	Radiotherapy induced	Focal hypopigmentation in irradiated/treated sites.
Neoplasm-Associated	Melanoma-associated leukoderma	Paraneoplastic; associated with melanoma and immune reaction.
	Mycosis fungoides	- Hypopigmented patches, (especially in children); - Requires biopsy.
Infectious Hypomelanoses	Leprosy	- Anaesthetic, hypopigmented patches; - Thickened nerves; - Endemic regions.
	Pityriasis versicolor	- Fine scaling, upper trunk, - Wood's lamp shows Yellow-green fluorescence.
	Leishmaniasis	Hypopigmentation after healing of cutaneous lesions.
	Onchocerciasis	"Leopard skin" depigmentation in endemic African areas.
	Treponematoses (pinta, syphilis)	Rare; hypopigmentation in later stages of infection.
Idiopathic Hypomelanoses	Idiopathic guttate hypomelanosis	Multiple, small, round white macules on shins/ forearms in elderly; melanocytes preserved.
	Progressive macular hypomelanosis	- Hypopigmented patches on trunk; - Wood's lamp shows orange-red follicular fluorescence.

Category	Condition	Differential Features
Congenital Hypomelanoses	Nevus depigmentosus	Stable, congenital, well-demarcated patch with serrated borders; does not enlarge.
	Nevus anemicus	Vascular anomaly: pale area that does not fill with blood when stroked or exposed to heat.
Other Conditions	Lichen sclerosus et atrophicus	White, atrophic plaques, often in genital area; scarring possible.
	Tinea versicolor	Develops when too much yeast grows on your skin. The excessive yeast leads to a rash that looks like round flat patches which can be lighter or darker than the surrounding skin.

Table no. 3: Differential Diagnosis in Ayurveda

Disease Name	Key Features (<i>Lakṣaṇa</i>)	Differentiating Point from <i>Śhvitra</i>	Relevant References
Śhvitra (श्वित्र)	White patches; discoloration without much elevation; can be red, black, or white in early stages; may involve hair whitening (<i>Romaśveta</i>), dry, non-itchy or mildly itchy	Main pathology is <i>Doṣhajaduṣṭi</i> of <i>Tvak</i> , <i>Rakta</i> , <i>Mamsa</i> , <i>Meda</i> with <i>Varṇa-vikāra</i> (discoloration); absence of significant elevation, discharge, or pain	Ca. Ni. 4, Su. Ni. 5
Kilasa (किलास)	White or black patches, more deeply rooted; three types (<i>Aruṇa</i> , <i>Śveta</i> , <i>Śyāva</i>); typically associated with stronger <i>Kapha-Doṣa</i> involvement	<i>Kilāsa</i> is sometimes considered a subtype of <i>Śhvitra</i> or a synonym, but may have more <i>Guru-Kapha lakṣaṇa</i> and deeper involvement	Su. Ni. 5
Kustha (कुष्ठ)	18 types; includes <i>Śhvitra</i> as one subtype; characterized by roughness, discoloration, itching, discharge, pain, and spreading	<i>Śhvitra</i> is a <i>Mahākustha</i> , but other <i>Kustha</i> show more <i>Śūla</i> , <i>Pāka</i> , <i>Srāva</i> , and <i>Dāha</i> ; also, more contagious and chronic	Ca. Ci. 7, Su. Ni. 5
Pāṇḍu (पाण्डु)	Generalized pallor (not localized); includes <i>Pāṇḍuta</i> of skin, nails, eyes; associated with fatigue, edema, etc.	<i>Pāṇḍu</i> is systemic and involves more than skin discoloration; <i>Śhvitra</i> is localized to skin	Ca. Ci. 16, Su. Ni. 4

Disease Name	Key Features (<i>Lakṣaṇa</i>)	Differentiating Point from <i>Śhvitra</i>	Relevant References
Vyanga (व्यङ्ग)	Bluish-black or dark brown pigmentation, mostly on face; due to emotions like anger or stress; no roughness or pain	<i>Vyanga</i> presents as dark patches rather than white; location and cause (<i>Krodha</i> , <i>Śoka</i>) are specific	A.H. Utt. 24
Nilika (नीलिका)	Bluish patches, due to vitiated <i>Vata</i> & <i>Rakta</i> ; associated with burning, pain	Unlike <i>Shvitra</i> which is white and mostly painless, <i>Nilika</i> is painful and bluish	Su. Ni. 13
Arunshvitra/ Aruṇa-Kilasa	Pinkish red patches, often itchy and inflamed, intermediate between <i>Shvitra</i> and <i>Kustha</i>	More reddish and inflamed, with possible pain or oozing	Su. Ni. 5
Darunaka/ Sidhma	Scaly white eruptions on face or body; dry, slightly itchy; flakes easily	Presence of scaling (<i>Rūkṣata</i> , <i>Kārśya</i>) and less depigmentation; differentiates from smooth, white patches in <i>Śvitra</i>	A.H. Utt. 32, Su. Ni. 13



SUPPORTIVE INVESTIGATION ^{27, 28, 29, 30, 31}

While vitiligo is primarily diagnosed clinically, a skin biopsy may occasionally be performed to distinguish it from other hypopigmentary disorders. Further testing is indicated when signs or symptoms suggest other clinical conditions as associated autoimmune or endocrine conditions, such as thyroid disease, diabetes mellitus, pernicious anemia, Addison's disease, or alopecia areata.

Table no. 4: Investigations may include: ^{32, 33, 34, 35, 36, 37, 38}

Test	Comment
Detailed history and Physical examination	
Complete Haemogram	A Complete haemogram can help detect abnormalities in blood cell counts that may indicate the associated conditions such as anaemia, or polycythemia, chronic infection or inflammations, etc.
Liver function test and Kidney Function test	Vitiligo is often associated with other autoimmune diseases, including thyroid disease, pernicious anemia, diabetes, and Addison's disease. Vitiligo is primarily diagnosed clinically, but Kidney Function Tests (KFT) and Liver Function Tests (LFT) are frequently included in the investigations to check for systemic autoimmune involvement, associated comorbidities, or to ensure safety before starting systemic treatments.

Test	Comment
Advanced investigations	
Wood's Lamp Examination	Especially helpful in fair-skinned individuals, this handheld UV light highlights vitiligo patches with a bright blue-white fluorescence, making early or subtle lesions easier to detect.
Thyroid panel: TSH, free T3, free T4, Anti-thyroid peroxidase antibody	Thyroid functional problems and autoimmune thyroid diseases have been linked to vitiligo. The two most significant and prevalent autoimmune thyroid conditions connected to vitiligo are Hashimoto thyroiditis and Graves' disease.
Antinuclear antibody (ANA)	ANAs are crucial for the identification of systemic autoimmune rheumatic disorders (SARDs) or any organ-specific autoimmune diseases.

DIAGNOSTIC CRITERIA³⁹

Vitiligo is typically diagnosed clinically, based on the presence of acquired, amelanotic, non-scaly, chalky-white macules with well-defined margins. These lesions often follow characteristic distribution patterns, including periorificial areas, lips, distal extremities, genitalia, segmental zones, and sites of friction.

Confirmatory laboratory investigations are generally unnecessary, except when required to rule out other differential diagnoses. Histopathological examination of the central portion of a vitiligo lesion reveals complete loss of melanin pigment in the epidermis and an absence of melanocytes. Occasionally, lymphocytic infiltration may be observed at the advancing margins of the lesions, suggesting active disease progression.

Table no. 5: Assessment Tools for Extent and Severity

Tool	Comments
VASI (Vitiligo Area Scoring Index)	Widely used in clinical trials; validated for assessing extent and depigmentation.
VES (Vitiligo Extent Score)	Validated for clinical use and has high intra- and inter-rater reliability. Self-administered version (SA-VES) also validated.
VIDA (Vitiligo Disease Activity Score)	- Simple clinical scale validated for assessing disease activity; - Based on patient history.
VETF Score (Vitiligo European Task Force)	Comprehensive, validated scale used in research; include extent, stage, and spread.
DLQI (Dermatology Life Quality Index)	Broadly validated across dermatological conditions, including vitiligo.
Skindex-29 / Skindex-16	Skin-specific QoL instruments; validated in vitiligo and other conditions.
VIS (Vitiligo Impact Scale)	Specifically developed and validated for assessing the psychosocial impact of vitiligo.

The clinical criteria for the diagnosis of segmental vitiligo: ³⁹

Essential criteria (major)
Acquired depigmented macules occurring unilaterally not crossing the midline or with minimal spill onto the opposite side
Localized to a particular body area/site
Patterned distribution including recognizable patterns, viz., blaschkoid, dermatomal, phylloid, checkerboard, linear/oblong or any other specific type
Additional criteria (minor)
Age at onset <15 years
Leucotrichia >50% over the affected lesion
Leucotrichia extending beyond the margin
Presence of islands of normal or hyperpigmentation within the lesion or segment without treatment
Margins >50% irregular/straight line
Stability achieved in disease progression by 1 year
<i>Patients fulfilling all essential and one or more of the additional criteria are classified as segmental vitiligo and remaining patients as nonsegmental vitiligo.</i>

Diagnostic Criteria in Ayurveda

The involvement of the *Doshas* and *Dhatus* and their specific clinical presentations are the basic criteria for the diagnosis of *Shvitra*.

Table no. 6: Prognosis

Criteria	<i>Sadhya Lakshana</i>	<i>Asadhya Lakshana</i>
Nidana	<i>Doshabalapravritti</i>	<i>Adibalapravritti</i>
Characteristics	- Patches thin and pale - non confluent - Hair colour unchanged in vitiligo patches - No or Mild swelling	- Patches numerous and - Patches confluent/ merged - Hair colour changed in vitiligo patches to red or white or coppery
Chronicity	Duration < 1 year	Duration > 1 year
Loci		Located on lips, palms, soles or genitalia
Cause		Caused by burn and wound

PRINCIPLES OF MANAGEMENT

The principles of management include assessment of signs and symptoms before initiating treatment and the need for management through conventional treatment for associated co morbidities. If the patient is already under standard care, the physician may advise to continue

the same along with add-on Ayurvedic treatment and can be assessed for the same in the follow ups for tapering or discontinue the treatment in consultation with the conventional physician.

It must be noted that the therapy should address TWO key issues

1 Repigmentation

2. Stopping the Autoimmune process

As pigment cells are only present deep in the hair follicles, treatments mostly try to get melanocytes to divide and migrate into affected skin. The aims of vitiligo treatment are repigmentation and stabilization of the depigmentation process. In addition, agents that help to ameliorate the oxidative stress are a useful adjunct. The choice of therapy depends on the extent, location, and activity of disease as well as the patient's age, skin type and motivation to undergo treatment. In general, a period of at least 2–3 months is required to determine whether a particular treatment is effective. The areas of the body that typically have the best response to medical therapy are the face, neck, midextremities and trunk, while the distal extremities and lips are the most resistant to treatment.

Red Flag Signs

These signs should be assessed before initiating treatment.

- Rapidly spreading or widespread depigmentation – suggests active disease needing early intervention.
- Poliosis (white hair in lesions) – Indicates deep melanocyte loss; often resistant to treatment.
- Mucosal or genital involvement – Associated with higher psychosocial impact and poor response.
- Onset after age 60 or in infants – Atypical; consider alternative diagnoses (e.g., lymphoma, post-inflammatory changes).
- Associated autoimmune diseases – Screen for thyroid, diabetes, etc.

(A) Prevention

The prevention of vitiligo involves a three-tiered approach: Primary, Secondary, and Tertiary prevention.

- **Primary prevention** aims to reduce the risk of disease onset by avoiding known triggers such as skin trauma, chemical exposure, and excessive sunburn, while promoting immune health through stress management, a balanced antioxidant-rich diet, and healthy lifestyle practices.
- **Secondary prevention** focuses on early identification and prompt treatment to prevent disease progression, along with sun protection and regular monitoring using validated tools like the VIDA score.
- **Tertiary prevention** is directed toward managing established vitiligo, enhancing repigmentation through individualized therapy, addressing psychosocial concerns with counseling, improving cosmetic appearance, and monitoring for associated autoimmune conditions.

Diet ⁴⁰

Emerging evidence suggests that nutritional modulation may aid in vitiligo prevention and management by supporting melanocyte health and reducing oxidative stress. A diet rich in antioxidants, vitamins, and minerals is recommended.

- Recommended dietary components:
- Antioxidants (Vitamin C, E, β -carotene, selenium, zinc)
- Folic acid, Vitamin B12, and Copper (important for melanogenesis)
- Phytochemicals (from fruits, vegetables, green tea, turmeric)

Lifestyle ⁴¹

Lifestyle practices that reduce physical and psychological stress are vital, as stress is a known trigger for vitiligo onset and progression.

- Avoidance of skin trauma (e.g., tight clothing, cosmetic irritants) to reduce Koebner phenomenon
- Stress management techniques such as meditation, mindfulness, and counseling
- Adequate sun protection to prevent photodamage of depigmented skin
- Maintenance of sleep hygiene and regular circadian rhythms

Yoga ⁴²

Yoga and related practices have shown beneficial effects in vitiligo, primarily through modulation of the immune system, stress reduction, and enhancement of systemic antioxidant status. Some of the practices found helpful are as follows:

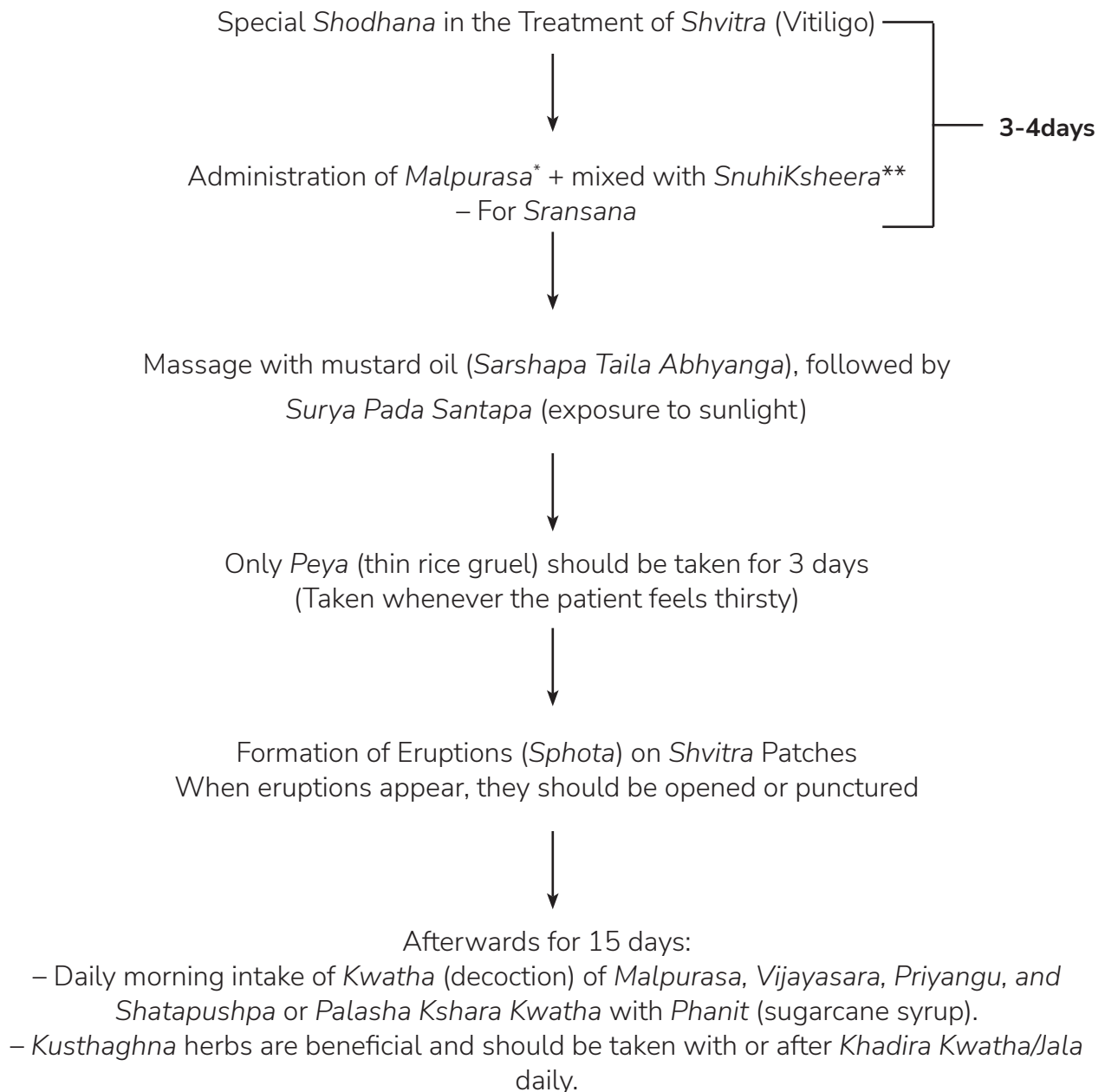
- Pranayama (breathing exercises)
- Surya Namaskar (sun salutation)
- Shavasana, Yoga Nidra for relaxation
- Meditation to reduce anxiety and autoimmune activation
- (Proper guidance from a yoga expert is essential before practicing yoga for skin disorders)

B) Curative

• **Shodhana (Purification therapies)**

For *Shodhana*, generally *Vamana* (therapeutic emesis) and *Virechana* (therapeutic purgation) are used, and *Basti* (medicated enema) may be administered if necessary. After achieving proper purification (*Samyak Shuddhi*) and following the *Samsarjana Krama* (gradual dietary regimen), the following special therapeutic procedures are advised for the treatment of *Shvitra* (vitiligo). These procedures, when systematically administered, can lead to the desired formation of therapeutic eruptions or lesions (*Sphotas*).

The specific treatment protocol advised in the management of the *Shvitrarogais* as follows:



- **Shamana Chikitsa (Pacification)**

The *Shamana Chikitsa* in the *Shvitraroga* precedes the *Shodhana Chikitsa* in most cases. The *Chikitsa* is aimed at the pacification of the residual doshas after purification and is carefully planned as per the evaluation. The common drugs used in the management are as follows:

Table No.7: Some formulations used in management of *Shvitra*.

S. No.	Drug Name	Dosage Form	Dose	Time	Duration	Adjuvant / Anupana
INTERNAL MEDICATIONS:						
1.	<i>Khadir Kwath</i> ⁴³ (<i>Khadira sara</i> is also effective in a dose of 2g total/day)	<i>Kwath</i>	25–50 ml	Empty stomach	4–8 weeks	Honey / Warm water
2.	<i>Manjishthadi Kwath</i> ⁴⁴	<i>Kwath</i>	25–50 ml	Morning & evening	4–6 weeks	Warm water
3.	<i>Patolmuladi Kwath</i> ⁴⁵	<i>Kwath</i>	25–50 ml	Morning & evening	4–6 weeks	Warm water
4.	<i>Panchnimbadi Churna</i> ⁴⁶	<i>Churna</i>	1–3 gm	Twice a day	4–6 weeks	Honey / Lukewarm water
5.	<i>Triphaladi Churna</i> ⁴⁷	<i>Churna</i>	1–3 gm	After meals	4–6 weeks	Honey
6.	<i>Bakuchi Churna</i> ⁴⁸	<i>Churna</i>	1–3 gm	After meals	6–12 weeks	Lukewarm water
7.	<i>Shashilekha Vati</i> ⁴⁹	<i>Vati</i>	250–500 mg	Twice a day	6–8 weeks	Honey
8.	<i>Vyoshadi Gutika</i> ⁵⁰	<i>Gutika</i>	250–500 mg	After meals	6–8 weeks	Warm water
9.	<i>Avalgujadi Gutika</i> ⁵¹	<i>Gutika</i>	250–500 mg	After meals	6–8 weeks	Warm water
10.	<i>Amruta Guggulu</i> ⁵²	<i>Vati</i>	500 mg	Twice a day	6–12 weeks	Warm water
11.	<i>Mahatiktka Ghrita</i> ⁵³	<i>Ghrita</i>	10–15 ml	Empty stomach	4–8 weeks	Warm water
12.	<i>Tikthaka Ghrita</i> ⁵⁴	<i>Ghrita</i>	10–15 ml	Empty stomach	4–8 weeks	Warm water
13.	<i>Khadirarishta</i> ⁵⁵	<i>Asava / Arishta</i>	15–25 ml	After meals	6–8 weeks	Equal qty warm water
14.	<i>Sarivadyasava</i> ⁵⁶	<i>Asava</i>	15–25 ml	After meals	6–8 weeks	Equal qty warm water
15.	<i>Madhvasava</i> ⁵⁷	<i>Asava</i>	15–25 ml	After meals	6–8 weeks	Equal qty warm water
16.	<i>Kanakbindvarishta</i> ⁵⁸	<i>Arishta</i>	15–25 ml	After meals	6–8 weeks	Equal qty warm water
17.	<i>Rasamanikya</i> ⁵⁹	<i>Rasa</i>	125 mg	After meals	4–6 weeks	Honey
18.	<i>Gandhak Rasayana</i> ⁶⁰	<i>Rasa</i>	250–500 mg	After meals	8–12 weeks	Milk / Ghee
19.	<i>Talakeshwar Rasa</i> ⁶¹	<i>Rasa</i>	125–250 mg	After meals	6–8 weeks	Ghee / Warm water
EXTERNAL MEDICATIONS:						
20.	<i>Mahamarichyadi Taila</i> ⁶²	<i>Taila</i>	As required	Local application	Regular	External use only

S. No.	Drug Name	Dosage Form	Dose	Time	Duration	Adjuvant / Anupana
21.	<i>Tuvaraka Taila</i> ⁶³	<i>Taila</i>	As required	Local application	Regular	External use only
22.	<i>Aragavadhaadi Taila</i> ⁶⁴	<i>Taila</i>	As required	Local application	Regular	External use only
23.	<i>Somraji Taila</i> ⁶⁵	<i>Taila</i>	As required	Before sun exposure	Regular	External use only
24.	<i>Manahshiladi Lepa</i> ⁶⁶	<i>Lepa</i>	As required	Before sun exposure	Regular	Cow urine / oil
25.	<i>Triphaladi Lepa</i> ⁶⁷	<i>Lepa</i>	As required	Daily	Regular	Cow urine / oil
26.	<i>Neelotpaladi Lepa</i> ⁶⁸	<i>Lepa</i>	As required	Daily	Regular	Oil or water
27.	<i>Bakuchi Lepa</i> ⁶⁹	<i>Lepa</i>	As required	Before sun exposure	Regular	Cow urine

NOTE: Out of the drugs mentioned above any one of the drugs or in the combination may be prescribed by the physician. The duration of the treatment may vary from patient to patient. Physician should decide the dosage (per dose) and duration of the therapy based on the clinical findings and with empirical evidence on the response to therapy.

Preferable & Restricted Diet and Lifestyle

Table no. 8: Pathya-Apathya (Do's & Don'ts) for Kustha* (Skin Disorders)⁷²

Pathya/ Do's	Apathya / Don'ts
1. <i>Laghu anna</i> (Light food)	1. <i>Dugdha</i> (milk),
2. <i>Tikta shaka</i> (green leafy vegetables)	2. <i>Dadhi</i> (curd),
3. <i>Ghrita</i> (Ghrita)	3. <i>Kulatha</i> (horse gram),
4. <i>Mudga</i> (Green gram)	4. <i>Masha</i> (black gram),
5. <i>Aadaki</i> (Pigeon pea)	5. <i>Nishpava</i> (green peas),
6. <i>Masoor</i> (Red lentil)	6. <i>Ikshu</i> (sugarcane),
7. <i>Yava</i> (barley)	7. <i>Amla Rasa</i> (sour fruits),
8. <i>Godhooma</i> (wheat)	8. <i>Virudha Ahara</i> (incompatible food),
9. <i>Madhu</i> (Honey)	9. <i>Adhyasana</i> (taking another meal before the earlier one is digested),
10. <i>Shali</i> (Rice)	10. <i>Ajeerna</i> (indigestion),
11. <i>Karkati</i> (Cucumber)	11. <i>Vishamasana</i> (untimely food)
10. <i>Triphala</i>	12. <i>Vidahi</i> burning sensation), <i>Vishtambhi</i> and
11. <i>Patola</i> (Snake gourd)	(<i>Abhishyandiahara</i>
12. <i>Nimbapatra</i> (Neem leaves)	13. <i>Matsya</i> (fish)
13. <i>Lasuna</i> (garlic)	14. <i>Guda</i> (jaggery)
14. <i>Tila Taila</i> (gingelly oil)	15. <i>Tila</i> (sesame)
15. <i>Sarshapataila</i> (Mustard oil)	16. <i>Dravasnigdha guru Ahara</i> (liquid, unctuous and heavy to digest food)

Pathya/ Do's	Apathya / Don'ts
Vihara- Apathya	
1. Vegavaraodha (Suppression of natural urges) 1. Atapasevana (Over exposure to Sun) 2. Drinking cold water after direct exposure to the sun and after exertion. 3. Consuming food before the complete digestion of the previous meal. 4. Day sleep 5. Stress 6. Doing exercise or over exertion immediately after heavy meals 7. Over exertion after <i>Snehapana</i> & <i>Vamana</i> 8. Sudden change from cold to heat or heat to cold without following the rules of gradual change 9. Sudden change from <i>Santarpana</i> to <i>Apatarpana</i> & Vice-versa 10. Improper administration of <i>Snehapana</i> and <i>Panchakarma</i> Procedures	

Line of treatment

At level 1- (Solo Physician Clinic/Health & Health Clinic/PHC (Optimal Standard of treatment in situation where technology and resources are limited)

Clinical Diagnosis

- Clinical Criteria-Observation of well-demarcated, milky-white macules or patches
Check for symmetry, sensation and common sites (face, hands, genitals, etc.)
- Family History - Enquire about similar conditions in family
- Provisional Diagnosis- Based on the history and presence of acquired depigmented patches

In most cases, **no laboratory investigations** are required unless there are clinical signs suggestive of associated autoimmune or endocrine disorders. Patient counselling, reassurance, and early initiation of treatment can be effectively initiated.

Management

1. Patient Assessment & Categorization

- Evaluate disease severity, *Doshic* involvement, *Agni*, and systemic signs.

Table no. 9: Examination of *Dosha* Involvement:

Clinical Features	Doṣha Involved (✓)
• Dryness, roughness, blackish edge	☐ Vāta
• Redness, burning, inflammation	☐ Pitta
• White thick patches, itching, heaviness	☐ Kapha
• Mixed features	☐ Sannipāta

Table no. 10: Examination of Agni:

Agni Type	Characteristics Observed	Tick (✓)
<i>Samāgni</i>	Normal digestion, clear belching, no heaviness	☐
<i>Viṣamāgni</i>	Irregular digestion, sometimes strong/sometimes weak appetite	☐
<i>Tikṣṇāgni</i>	Fast digestion, excessive hunger, burning sensation	☐
<i>Mandāgni</i>	Slow digestion, heaviness, bloating, dull appetite	☐

Table no. 11: Examination of Ama:

Signs & Symptoms	Present (✓)	Absent (✓)
Coated tongue	☐	☐
Heaviness post-meals	☐	☐
Loss of appetite	☐	☐
Sticky, foul-smelling stools	☐	☐
General fatigue, malaise	☐	☐

- Categorize patient as:
 - Requires *Shodhana*
 - Suitable for *Shamana* only

If *Shodhana* is Required

- Refer to Level 2 or Level 3 Ayurvedic hospital.
- Provide case summary and referral note.

If *Shamana* is Suitable

- Counsel the patient:
 - *Shvitra* is manageable and non-contagious
 - Emphasize diet/lifestyle adherence and regular treatment
- Prescribe treatment as per Table 7. Select oral and local therapies based on *Dosha*, lesion site, and strength

Follow up: Review every 15–30 days.

Referral Criteria

Patients with vitiligo should be referred to a higher-level facility (Level 2 or 3) under the following circumstances:

- Uncertain Diagnosis – Atypical presentation or diagnostic confusion with other hypopigmented disorders (e.g., leprosy, pityriasis alba, tinea versicolor).
- Rapid Progression – Sudden and extensive spread of depigmented lesions.
- Mucosal or Extensive Involvement – Vitiligo affecting genital mucosa, lips, eyelids, or involving 10% of body surface area.

- Severe Psychological Distress – Evidence of anxiety, depression, or social withdrawal due to cosmetic impact.
- Unresponsive to Initial Management – No improvement after a reasonable period of individualized care.
- Suspected Associated Autoimmune Disorders – Presence of signs suggestive of thyroid disease, diabetes, or adrenal insufficiency requiring investigation and specialist input.
- Uncontrolled comorbidities.
- Evidence of an increase in severity/complications.
- Substantial impact on their quality of life and activities of daily living

At Level 2- (CHC/Small hospitals (10-20 bedded hospitals with basic facilities such as routine, investigation, X-ray)

Clinical Diagnosis: The case referred from Level 1, or a fresh case must be evaluated thoroughly.

Investigations:

The diagnosis would be primarily clinical along with some investigations which will be necessary to investigate complications or exclude other differential diagnoses as follows:

- Complete Haemogram

Management

Clinical Evaluation:

- Assess extent and stage of lesions, *Dosha* involvement, *Agni*, *Aama*, and systemic symptoms.
- Review previous treatments and response.

Categorization:

- **Shodhana required:** Moderate to severe cases, chronic or *Bahu Dosha Avastha*
- **Shamana suitable:** Mild, localized, early-stage cases.

Shodhana Administration:

- **Panchakarma procedures** like *Virechana* (therapeutic purgation)

Shamana Chikitsa Protocol:

- **Patient Counselling** on non-contagious nature and treatability of Shvitra.
- **Initiate Treatment:**
 - ◇ Use medicines as per standard protocol (Table 7).
 - ◇ Combine internal medications with local therapies (*Lepa*, *Suryapadsantap*, etc.).
 - ◇ Simple *Raktamokshana* may be done if expertise is available.

Follow-Up: Review every 15–30 days.

Referral Criteria

Patients at Level 2 should be referred to higher centers under the following conditions:

- Same as mentioned earlier at level 1, plus
- No clinical improvement or worsening despite appropriate homoeopathic management.
- Complications requiring advanced diagnostic tools or specialty care.
- Need for multidisciplinary evaluation or emergency care.
- Non-responsiveness in suspected autoimmune, systemic, or rapidly progressing pathology.
- Diagnostic uncertainty requires investigation beyond the available infrastructure.
- Referral should be made to Ayush Level 3 or appropriate higher-level healthcare facilities with specialist services and comprehensive diagnostic setups.
- Any other complications that threaten the life of the patient.

Level 3- (Ayush hospitals attached with teaching Institution, District Level/Integrated/State Ayush Hospitals)

Clinical Diagnosis: Same as Level 1 & 2.

Confirm diagnosis and severity with the help of investigations such as:

- Thyroid function tests (TSH, fT3, fT4), anti-thyroid antibodies, ANA, fasting glucose levels, HbA1c.
- Wood's lamp examination can be used to enhance the visibility of depigmented lesions, particularly in fair-skinned individuals or early-stage disease. If needed, differential diagnosis from other hypopigmented conditions (e.g., pityriasis versicolor, post-inflammatory hypopigmentation) can be aided by routine investigations and clinical pattern recognition. (In case of clinical suspicion or doubt)

Management Protocol

- **Panchakarma Therapy**
 - Based on *Dosha* predominance, disease chronicity, and patient's *Bala*:
 - *Vamana*
 - *Virechana*
 - *Basti*
 - *Raktamokshana* (Consider the table below to prescribe the appropriate method)

Table No.12 : Types of *Raktamokshana* and its details

S. No.	Type of <i>Raktashodhana</i>	Method Used (Procedure)	Indications / Suitability	Dominant <i>Doṣa</i> Involved	Preferred Sites	Remarks
1	<i>Sirāvedha</i>	Venesection (vein puncture)	Chronic, large lesions; deep-seated <i>Doṣa</i> vitiation	<i>Pitta-Rakta</i>	Forearm, dorsal foot, cephalic vein	Quick and potent; avoid in debilitated patients

S. No.	Type of <i>Raktashodhana</i>	Method Used (Procedure)	Indications / Suitability	Dominant <i>Doṣa</i> Involved	Preferred Sites	Remarks
2	<i>Jalauka-Avacharaṇa</i>	Leech application	Pitta-Kapha type <i>Śvitra</i> with burning or reddish patches	<i>Pitta-Kapha</i>	Face, neck, soft or inflamed areas	Gentle; suitable for children, elderly, delicate skin
3	<i>Prachchhanna</i>	Scarification with blade	Localized patches with stable lesions	<i>Kapha-Rakta</i>	Directly over affected lesion	Mild; good for superficial symptoms
4	<i>Alabu</i>	Cupping with dried gourd	Slightly raised, thickened lesions with Kapha dominance	<i>Kapha</i>	Shoulders, limbs	Improves local circulation and lymphatic drainage
5	<i>Śṛṅga</i>	Horn-based cupping	Deeper lesions, <i>Vāta-Kapha</i> dushti	<i>Vāta-Kapha</i>	Back, thighs	Traditional method; requires skilled application
6	<i>Ghaṭī Yantra</i> (	Metallic cupping	When stronger suction is needed than <i>Alabu</i>	<i>Kapha-Vāta</i>	Arms, back, flanks	Powerful; not suitable for very weak or thin patients

Internal Medication: Use medicines as per standard protocol (Table 7).,

➤ Combine internal medications with local therapies (*lepa*, *suryapadsantap*, etc.).

• **Rasayana Therapy**

Post-*shodhana* or with long-term *shamana* therapy to restore melanocyte function

Use of drugs like *Chyawanprash*, *Amalaki Rasayana*, or specific tailor-made *Rasayana* compounds

• **Local Applications & Procedures**

Bakuchitaila or *Lepa yogas* with phototherapy (controlled sun exposure or UV lamps if available)

- **Diet & Lifestyle Advice:** Continue *Ahara-Vihara* counselling tailored to dosha and patient constitution

➤ **Follow-Up**

First Month:

- Follow up **every 7–10 days**
- Check treatment response and adjust if needed

1 to 3 Months:

- Follow up **every 15 days**
- Monitor pigmentation and lesion changes

3 to 6 Months:

- Follow up **once a month**
- Continue medicines, Rasāyana, and lifestyle advice

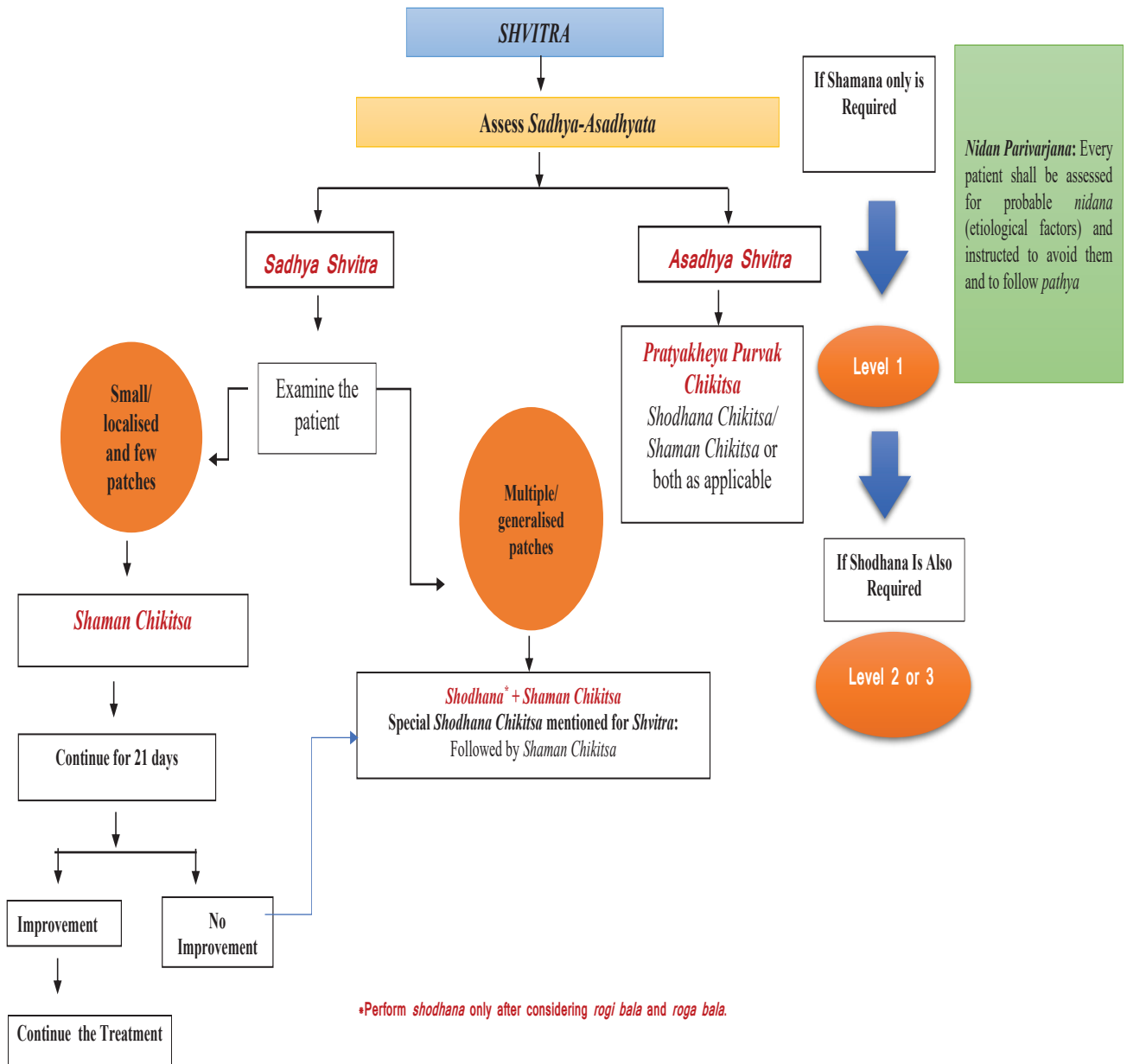
After 6 Months:

- Follow up **every 2–3 months**
- Watch for relapse and give long-term guidance

Referral Criteria: Same as mentioned earlier at level 2 plus

- Other therapeutic modalities—such as counseling, yoga, dietary modifications, or integrative Ayush approaches etc—may be considered based on the complexity and individualized needs of the patient.
- In select cases, referral to higher centers may also be appropriate for psychological reassurance or cosmetic interventions.

ALGORITHM FOR TREATMENT FOR SHVITRA



REFERENCES

1. Manoj R, Singh S, Kothari R, Gupta A. Vitiligo. *J Am Acad Dermatol*. 2024;90(5):1106-1114.
2. Marchioro HZ, Silva de Castro CC, Fava VM, Sakiyama PH, Dellatorre G, Miot HA. Update on the pathogenesis of vitiligo. *An Bras Dermatol*. 2022;97(4):478-490.
3. Okoro U, Heath CR, Usatine RP. Vitiligo. *J Fam Pract*. 2023;72(1):E19-E20.
4. Sardana K, Agarwal P Disorders of Skin Pigmentation Textbook of Dermatology and Sexually Transmitted Diseases. 3rd Edition .CBS Publishers & Distributors Private Limited; New Delhi 2025. Ch 18; 246-257.
5. Anonymous. Ayurveda based Clinical Methods For Examination of skin Diseases(TwakVikara) 1st Edn, 2019 Central Council for research in Ayurvedic Sciences, NewDelhi
6. Critical analysis of Vitiligo (Shwitra) : An Ayurvedic Perspective, Dr. R. B. HosamaniAssociate Professor, Dept. of Swasthavritta and Yoga, B.V.V. Sangha's Ayurved Medical College and Hospital, Bagalkot, Karnataka. INDIA. ISSN 2456-3110
7. Ezzedine K, Eleftheriadou V, Whitton M, van Geel N. Vitiligo. *Lancet*. 2015;386(9988):74-84. doi:10.1016/S0140-6736(14)60763-7.
8. Gandhi K, Ezzedine K, Anastassopoulos KP, et al. Prevalence of Vitiligo Among Adults in the United States. *JAMA Dermatol*. 2022;158(1):43-50.
9. Mahajan VK, Vashist S, Chauhan PS, Mehta KIS, Sharma V, Sharma A. Clinico-Epidemiological Profile of Patients with Vitiligo: A Retrospective Study from a Tertiary Care Center of North India. *Indian Dermatol Online J*. 2019;10(1):38-44.
10. Sardana K, Muddebihal A, Khurana A. JAK inhibitors in vitiligo: what they hit and what they miss - an immunopathogenesis based exposition of existing evidence. *Expert Rev Clin Pharmacol*. 2023 Jul-Dec;16(12):1221-1227.
11. Charaka Samhita, Chikitsa Sthana, Chapter 7, Verse 177. In: Tripathi B, editor. Charaka Samhita (Ayurveda Deepika Commentary). Varanasi: ChaukhambhaSurbharati Prakashan; p. 274.
12. Sardana K, Muddebihal A, Khurana A. JAK inhibitors in vitiligo: what they hit and what they miss - an immunopathogenesis based exposition of existing evidence. *Expert Rev Clin Pharmacol*. 2023 Jul-Dec;16(12):1221-1227. doi: 10.1080/17512433.2023.2285011. Epub 2023 Dec 9. PMID: 37982238.
13. Mathachan SR, Khurana A, Gautam RK, Kulhari A, Sharma L, Sardana K. Does oxidative stress correlate with disease activity and severity in vitiligo? An analytical study. *J Cosmet Dermatol*. 2021 Jan;20(1):352-359. doi: 10.1111/jocd.13499. Epub 2020 May 30. PMID: 32422682.
14. Jyoti S, Bhardwaj M, Sharath S, Sardana K, Arora P. A Study to Delineate the Immunohistological Parameters of Active Versus Stable Vitiligo Using S100, Melan A in Conjunction with CD4 and CD8 Immunohistochemistry Markers. *Indian Dermatol Online J*. 2025 Jun 12;16(4):576-580. doi: 10.4103/idoj.idoj_729_24. PMID: 40688127; PMCID: PMC12270435.
15. Charaka Samhita, Chikitsa Sthana, Chapter 7, Verse 4-8. In: Tripathi B, editor. Charaka Samhita (Ayurveda Deepika Commentary). Varanasi: ChaukhambhaSurbharati Prakashan; p. 268.
16. Charaka Samhita, Chikitsa Sthana, Chapter 7, Verse 177. In: Tripathi B, editor. Charaka Samhita (Ayurveda Deepika Commentary). Varanasi: ChaukhambhaSurbharati Prakashan; p. 274.
17. Ezzedine K, Lim HW, Suzuki T, et al. Revised classification/nomenclature of vitiligo and related issues: the Vitiligo Global Issues Consensus Conference. *Pigment Cell Melanoma Res*. 2012; 25(3):E1-E13.
18. Van Geel N, De Lille S, Vandenhoute S, et al. Different phenotypes of segmental vitiligo based on a clinical observational study. *J Eur Acad Dermatol Venereol*. 2011;25(6):673-678.
19. Eleftheriadou V. Reliability and validity of the Vitiligo Signs of Activity Score. *Br J Dermatol*. 2020 Nov;183(5):801-802.
20. Charaka Samhita, Chikitsa Sthana, Chapter 7, Verse 174. In: Tripathi B, editor. Charaka Samhita (Ayurveda Deepika Commentary). Varanasi: ChaukhambhaSurbharati Prakashan; p. 273.

21. Grän F, Emmerich K, Mohme S, Goebeler M, Gesierich A. Vitiligo-like lesions developing upon immune checkpoint inhibition in advanced melanoma. *Eur J Dermatol*. 2020 Feb 1;30(1):72-73.
22. Bergqvist C, Ezzedine K. Vitiligo: A Review. *Dermatology*. 2020;236(6):571-592. doi:10.1159/000506103
23. Joge RR, Kathane PU, Joshi SH. Vitiligo: A Narrative Review Article. *Cureus* [Internet]. 2022 Sep 18;14(9). Available from: <https://www.cureus.com/articles/110120-vitiligo-a-narrative-review-article>.
24. Sinha S, Sardana K. Contact leukoderma following irritant contact dermatitis to an isopropanol-based hand rub: A consequence of rigorous hand hygiene. *Contact Dermatitis*. 2021 May;84(5):346-348. doi: 10.1111/cod.13743. Epub 2020 Dec 1. PMID: 33188701; PMCID: PMC7754559.
25. Sardana K, Agarwal P Disorders of Skin Pigmentation Textbook of Dermatology and Sexually Transmitted Diseases. 3rd Edition .CBS Publishers & Distributors Private Limited; New Delhi 2025. Ch 18; 246-257
26. Feng Y, Lu Y. Advances in vitiligo: Update on therapeutic targets. *Frontiers in Immunology*. 2022 Aug 31;13.
27. Singh M, Jadeja SD, Vaishnav J, et al. Investigation of the Role of Interleukin 6 in Vitiligo Pathogenesis. *Immunol Invest*. 2022;51(1):120-137. doi:10.1080/08820139.2020.1813756
28. Matz H, Tur E. Vitiligo. *Curr Probl Dermatol*. 2007. 35:78-102.
29. Dahir AM, Thomsen SF. Comorbidities in vitiligo: comprehensive review. *International Journal of Dermatology* [Internet]. 2018 Oct 1 [cited 2021 Nov 1];57(10):1157-64. Available from: <https://pubmed.ncbi.nlm.nih.gov/29808541/>
30. Akl J, Lee S, Ju HJ, et al. Estimating the burden of vitiligo: a systematic review and modelling study. *Lancet Public Health* [Internet]. 2024;9(6): e386-e396. doi:10.1016/S2468-2667(24)00026-4
31. Chen ST, Semenov YR, Alloo A, et al. Defining D-irAEs: consensus-based disease definitions for the diagnosis of dermatologic adverse events from immune checkpoint inhibitor therapy. *J Immunother Cancer*. 2024;12(4): e007675. Published 2024 Apr 10. doi:10.1136/jitc-2023-007675.
32. Xia J, Melian C, Guo W, Usmani H, Clark R, Lozeau D. Vitiligo and Metabolic Syndrome: Systematic Review and Meta-Analysis. *JMIR Dermatol*. 2022;5(1):e34772. Published 2022 Mar 16. doi:10.2196/34772.
33. Ghosh S. Chemical Vitiligo: A Subset of Vitiligo. *Indian J Dermatol*. 2020;65(6):443-449. doi:10.4103/ijd.IJD_291_20.
34. Soliman SH, Bosseila M, Hegab DS, Ali DAM, Kabbash IA, AbdRabo FAG. Evaluation of diagnostic accuracy of dermoscopy in some common hypopigmented skin diseases. *Arch Dermatol Res*. 2024;316(8):562. Published 2024 Aug 23. doi:10.1007/s00403-024-03259-8.
35. Kitchen H, Wyrwich KW, Carmichael C, et al. Meaningful Changes in What Matters to Individuals with Vitiligo: Content Validity and Meaningful Change Thresholds of the Vitiligo Area Scoring Index (VASI). *Dermatol Ther (Heidelb)*. 2022;12(7):1623-1637. doi:10.1007/s13555-022-00752-8
36. AL-smadi K, Imran M, Leite-Silva VR, Mohammed Y. Vitiligo: A Review of Aetiology, Pathogenesis, Treatment, and Psychosocial Impact. *Cosmetics* [Internet]. 2023 Jun 1;10(3):84. Available from: <https://www.mdpi.com/2079-9284/10/3/84>
37. Daneshpazhooh M, Mostofizadeh G M, Behjati J, Akhyani M, Robati RM. Anti-thyroid peroxidase antibody and vitiligo: a controlled study. *BMC Dermatology*. 2006 Mar 10;6(1).
38. Ekhlas A. K. Kanani, Awatif H. Issa, & Khalil I. Al-Hamdi. (2023). Evaluation of autoimmune biomarkers in vitiligo patients' serum. *Journal of Population Therapeutics and Clinical Pharmacology*, 30(2), 283-290.
39. Alikhan A, Felsten LM, Daly M, PetronicRosic V. Vitiligo: a comprehensive overview Part I. Introduction, epidemiology, quality of life, diagnosis, differential diagnosis, associations, histopathology, etiology, and work-up. *J Am Acad Dermatol*. 2011 Sep;65(3):473-91.
40. Gupta P, Khaitan BK, Ramam M, et al. Validation of the diagnostic criteria for segmental vitiligo. *Indian J Dermatol Venereol Leprol*. 2020;86(6):656-662. doi: 10.4103/ijdvl.IJDVL_704_18Sardana K, Agarwal P Disorders of Skin Pigmentation Textbook of Dermatology and Sexually Transmitted Diseases. 3rd Edition. CBS Publishers & Distributors Private Limited; New Delhi 2025. Ch 18; 246-257.

41. Basha MA, Gamil H, Al-Ashkar DS, et al. Nutritional status in non-segmental vitiligo: a case-control study. *Clin Cosmet Investig Dermatol*. 2020; 13:103–108.
42. Singh S, Kumar S, Narang T. Role of yoga in autoimmune diseases including vitiligo: Current insights. *J Integr Med*. 2021;19(5):416–422.
43. Charaka Samhita, Chikitsa Sthana, Chapter 7, Verse 174. In: Tripathi B, editor. Charaka Samhita (Ayurveda Deepika Commentary). Varanasi: ChaukhambhaSurbharati Prakashan; p. 273.
44. Pandey J, editor. Harita Samhita. 1st ed. Varanasi: Chaukhambha Vishvabharati; 2010. p. 435
45. Ayurvedic Formulary of India (e AFI). Part I: New Delhi: Ayurvedic Pharmacopoeia Committee, Ministry of Health and family welfare, Government of India; Available from: e book via "e Ayu: Formulary of India" (online repository) p.184-18546.
46. Anonymous, The Ayurvedic Formulary of India, Part III, 1st ed., Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy (AYUSH), Ministry of Health and Family Welfare, Pharmacopoeia Commission for Indian Medicine & Homoeopathy, Government of India, Ministry of AYUSH. Ghaziabad, India), 2011; pp. 121-122.
47. Mehta, Mehul & Gohil, Kunal & Bhatt, Griva & Mendpara, Raj. (2026). Triphaladi Churna: A Scientific Review Of Its Composition, Phytochemical Synergy, And Therapeutic Potential. 13. 283-289.
48. Vāgbhāṭa. Aṣṭāṅga Hṛdaya. Sūtra Sthāna, Chapter 20, verse 18. Varanasi: Chaukhambha Surbharati Prakashan; 2008. p. 820.
49. Kumari A, Tewari P, editors. Yogaratnakara: a complete treatise on Ayurveda. 1st ed. Varanasi: Chaukhambha Visvabharati; 2010. Ch. 55, verses 220-221, p. 935.
50. Sharangadhara. Sharangadhara Samhita. Tripathi B, editor. Varanasi: Chaukhamba Surbharati Prakashan; 2017. Ch. 07, verses 22-23, p. 132.
51. Vagbhata. Ashtanga Hridaya. Tripathi B, editor. Delhi: Chaukhamba Sanskrit Pratishthan; 2015. Chikitsa Sthana, ch. 20, verse 13.
52. Bhavmisra. Bhavaprakasa. Vol. 2.: Sitaram B, editor. Varanasi: Chaukhambha Orientalia; First Edition; 2010. p. 351
53. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Vol. 1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.283-285
54. Government of India. The Ayurvedic Pharmacopoeia of India. 2nd ed. Part1. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2003. p.249-250.
55. Sharangadhara. Sharangadhara Samhita. Tripathi B, editor. Varanasi: Chaukhamba Surbharati Prakashan; 2017. Ch. 10, verses 62-67, p. 170.
56. Anonymous. Ayurvedic Formulary of India. Part -1, 2nd ed. Government of India, Ministry of Health and Family Welfare; 2003. p.22
57. Anonymous. Ayurvedic Formulary of India. Part -1, 2nd ed. Government of India, Ministry of Health and Family Welfare; New Delhi: 2003. p.88-89
58. Charaka. Charaka Samhita: text with English translation. Sharma PV, translator. Varanasi: Chaukhambha Orientalia; 1998. Ch. 7, verses 77-79, p. 132.
59. Bhatta K.G, Sangraha Rasendra Sara, Tripathi I. D. Hindi commentary. 2nd Edition. 191-196. Vol. 1. Varanasi: Chaukhamba Orientalia; 1998. pp. 48–49
60. Government of India. The Ayurvedic Pharmacopoeia of India. 1st English ed. Part 2. New Delhi: Department of Health and Family Welfare, Department of Indian Systems of Medicine and Homoeopathy; 2000. P.81-83
61. Govind Das, Bhaishajya Ratnavali, edited by Kaviraj Sri Ambikadattashastri Ayurvedacharya Vidyotini Hindi Vyakya, Choukamba Sanskrit Sansthana Varanasi, 54/79-82, pp1061

62. Govind Das, Bhaishajya Ratnavali, edited by Kaviraj Sri Ambikadattashastri Ayurvedacharya Vidyotini HindiVyakya, Choukamba Sanskrit Sansthana Varanasi, 54/83-84, pp. 1079
63. Acarya Sushruta, Sushruta Samhita, Nibandha Sangraha of Dalhanacharya - commentary, Acharya Triviktamatma Yadva Sharma (Ed), Varanasi: Chaukhambha Surabharati Prakashan 2008; p.457, 824.
64. Makwana SM, Bedarkar P, Patgiri BJ. Pharmaceutico-analytical standardization of Aragvadhadi Taila. Indian Syst Med. 2019;7:224–30
65. Govind Das, Bhaishajya Ratnavali, edited by Kaviraj Sri Ambikadattashastri Ayurvedacharya Vidyotini HindiVyakya, Choukamba Sanskrit Sansthana Varanasi, 54/93-95, pp1080
66. Goriya, Pankaj & Sagar, Dhvani & Ruknuddin, Galib & Shukla, Vinay & Prajapati, Pradeep. (2014). Formulation development and Physico-chemical Characterization of Kustha Taila. International Journal of Research in Ayurveda and Pharmacy. 5. 246-51.
67. Kumari A, Tewari P, editors. Yogaratnakara: a complete treatise on Ayurveda. 1st ed. Varanasi: Chaukhambha Visvabharati; 2010. Ch. 55, verses 212-213, p. 934.
68. Kumari A, Tewari P, editors. Yogaratnakara: a complete treatise on Ayurveda. 1st ed. Varanasi: Chaukhambha Visvabharati; 2010. Ch. 55, verses 214-215, p. 934.
69. Govind Das, Bhaishajya Ratnavali, edited by Kaviraj Sri Ambikadattashastri Ayurvedacharya Vidyotini HindiVyakya, Choukamba Sanskrit Sansthana Varanasi, 54/34, pp. 1054
70. Sena V. Pathyapathya Vinischaya. In: Kishore P, Padi MM, editors. New Delhi: Central Council for Research in Ayurveda & Siddha; 1999. p. 82–83