

# CANCER

(कर्करुबुद)

## Background

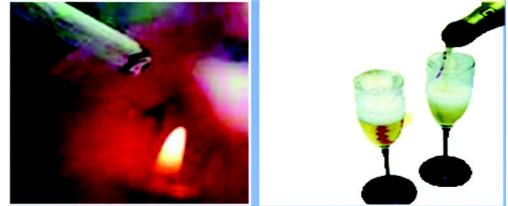
Cancer is the second leading cause of death after heart diseases. At global level, India has the highest number of oral cancer cases. The high rates of cervical and breast cancers have created a higher cancer burden in women than men.

The carcinogenic agents that people breathe, eat, drink and are otherwise exposed to, largely determine the occurrence of the disease. Tobacco use is the single most important risk factor for cancer causing about 20% of global cancer deaths and around 70% of global lung cancer deaths. At least 30% of the future cancer burden is potentially preventable by tobacco control.

In Ayurveda, cancer is described as inflammatory or non-inflammatory swelling and mentioned either as '*Granthi*' (minor neoplasm) or '*Arbuda*' (major neoplasm). Aggravated *Vata* and *Kapha doshas* affect the tissues resulting in development of a round, firm, large, deep rooted, slow growing fleshy growth associated with mild pain. 6 types of tumors have been described in Ayurveda based on the aggravated *Dosha* and the tissue involved viz. *Vataj*, *Pittaj*, *Kaphaj*, *Medoj*, *Mamsaj* and *Raktarbuda*. Among these *Mamsarbuda* and *Raktarbuda* are described as incurable.

## PROBABLE CAUSATIVE FACTORS

- Tobacco use,
- Being overweight or obese,
- Unhealthy diet with low fruit and vegetable intake,
- Lack of physical activity,
- Alcohol use,
- Sexually transmitted HPV-infection,
- Ionizing and non-ionizing radiation,
- Urban air pollution,
- Smoke (indoor or industrial) etc.



## Probable Signs for early detection of Cancer (CAUTION):

- **C**hange in bowel or bladder habits
- **A** sore that does not heal
- **U**nusual bleeding or discharge
- **T**hickening or lump in the breast or elsewhere
- **I**ndigestion or difficulty in swallowing
- **O**bvious change in a wart or mole
- **N**agging cough or hoarseness of voice

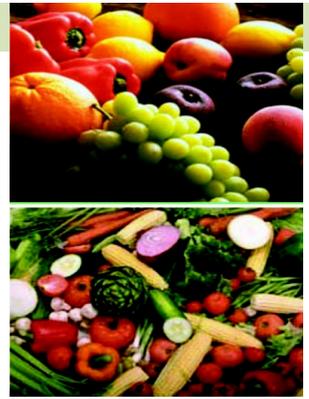
## IMPORTANCE OF EARLY DETECTION AND SCREENING

Cancer can be treated successfully if detected early. Screening is a means of early detection of the disease in asymptomatic individuals with the goal of decreasing morbidity and mortality. Screening can potentially save lives as shown in cervical, and breast cancer.

## General measures for prevention of Cancer

Public education on the avoidance of identified risk factors for cancer and encouraging healthy habits contributes to its prevention and control.

- Stop using tobacco in all forms
- Avoid consuming alcohol
- Adopt healthy food habits
- Choose predominantly plant based diets rich in fruits and vegetables
- Restrict the intake of red-meat (beef, pork etc.) and preserved meat
- Engage in regular physical activity
- Maintain optimum weight for height and age



**It is now known that over one-third of cancers are preventable, and one-third potentially curable provided they are diagnosed early in their course. The quality of life of patients with this incurable disease can be improved with palliative care. Ayurveda plays a major role in improving the Quality of life in cancer patients.**

**An approach to early cancer detection is through population screening. Currently, screening can be advocated for the cervix, breast and oral cancers.**

## ORAL CANCER

### Signs & Symptoms

- Raised white or red patch/sloughing ulcer/hard mass
- Pain/difficulty in opening mouth or swallowing
- Lump in the neck
- Numbness of the tongue or other area of the mouth
- Change in voice quality/Hoarseness of voice

### Screening strategy for Oral cancer: Examination of the mouth

Examine the interior of the mouth regularly to detect symptoms early. Examine the interiors of the mouth i.e., inside of cheeks and lips, the floor and roof of the mouth, the tongue and the lymph nodes in the neck, standing before a mirror in adequate light, for any red or white patch, or any other abnormal area. Feel the suspicious area with fingers to know its hardness and extent of spread.



### Oral Cancer Diagnostic Tests

After thorough examination, if symptoms indicate cancer, then suspect oral cancer. One or more of the following tests may be done to confirm cancer and its spread.



### Biopsy

A small tissue sample is taken for histo-pathological examination. Biopsy is the only sure way to know if the abnormal area is Cancer.

### Oral Cancer Prevention

**Cancers of the mouth are among the most preventable cancers.**

#### Do's:

- Eat a well-balanced, healthy diet with a variety of fruits and vegetables
- Examination of dentures by a dentist at least every five years

- Remove the dentures at night and clean them daily
- Wear a lip balm with sunscreen and a hat with a brim to limit sun exposure

#### Don'ts:

- Stop using Tobacco in all forms.
- Avoid Drinking alcohol.

#### Treatment

Surgery, Chemotherapy and Radiation therapy

## BREAST CANCER

Breast cancer is a malignant proliferation of epithelial cells lining the ducts or lobules of the breast. Being overweight, lack of exercise, smoking cigarettes, and eating unhealthy food are some of the factors associated with breast cancer. Breast cancer is a hormone dependent disease. Women without functioning ovaries who never receive Oestrogen replacement therapy may not develop breast cancer.

#### Signs & Symptoms

- Presence of any palpable mass/nodule in the breast(s) which are hard, irregular, tethered or fixed, or painless
- Abnormal skin changes or retractions over the breast
- Nipple discharges
- Enlargement or Inflammation in the regional lymph nodes

#### Screening strategy for Breast Cancer

- Breast self-examination (BSE) - **monthly** (preferably during the follicular phase of the menstrual cycle i.e. days 5-7 of the cycle are the best time for the breast examination ) - after the age of 30
- Clinical breast examination by a Health worker/Doctor (Medical Personnel)
- Mammography - after the age of 35

**Regular Self-examination increases the likelihood of detecting a mass at a smaller size when it can be treated with more limited surgery. Self-examination leads to increased biopsy rate though it does not itself reduce breast cancer.**

#### Diagnostic Tests

If anything found abnormal on Breast Examination, then following tests may be done for confirmation.

- Mammography
- Biopsy –Aspiration Biopsy

#### Prevention

- **Early detection can achieve a longer survival. The major benefit of BSE is identification of tumors appropriate for conservative local therapy. Breast cancer is virtually unique among the epithelial tumors in adults in that screening in the form of annual mammography improves survival.**
- **Encourage Breast feeding:** According to studies, Breastfeeding can lower breast cancer risk, especially if a woman breastfeeds for longer than 1 year. Beyond breast health protection, breastfeeding provides important health benefits to the baby and helps the bonding process
- **Alternative of HRT for menopausal symptoms:** Current or recent past users of hormonal replacement therapy (HRT) have a higher risk of being diagnosed with breast cancer. Research

strongly suggests that estrogen-only HRT appears to increase breast cancer risk less than combination HRT. If you're having severe hot flashes or other menopausal side effects and have a personal history of breast cancer, consult your doctor about non-hormonal options, such as dietary changes, exercise, weight management, or meditation.

- **Maintain a healthy weight:** Overweight and obese women have a higher risk of being diagnosed with breast cancer compared to women who maintain a healthy weight, especially after menopause.
- **Regular exercise:** Research shows a link between exercising regularly at a moderate or intense level for 4 to 7 hours per week and a lower risk of breast cancer.

## Treatment

Radical Mastectomy, Chemotherapy and Radiation therapy

## CERVICAL CANCER

### PROBABLE CAUSATIVE FACTORS

The probable risk factors are early age at marriage, multiple sexual partners, multiple pregnancies, poor genital hygiene, malnutrition, use of oral contraceptives, and lack of awareness.

### Signs & Symptoms

Patients with Cervical cancer are generally asymptomatic, and the disease is detected on routine pelvic examination.

- Abnormal bleeding or post coital spotting that may increase to inter-menstrual or prominent menstrual bleeding, Post menopausal bleeding
- Feeling of any mass per vaginum
- Yellowish vaginal discharge
- Lumbo-sacral back pain
- Lower extremity edema
- Urinary symptoms

### Screening strategy

Screening for precancerous and cancerous cells using Pap tests has reduced cervical cancer development. After the age of 35, Pap smear may be done **once in a year** for screening of cancer

- Pap smear test
- Visual Inspection with Acetic acid (VIA) test

### Diagnostic tests

If any abnormality found in the above tests, the following tests can be done for confirmation

- **Colposcopic-directed Biopsy**
- **Cone Biopsy** (in case of Endo-cervical tumor)

### Prevention strategy for cervical cancer

- **Vaccination against pathologic HPV appears to be an effective Cervical cancer prevention strategy.**
- Marriage at appropriate age
- Avoiding multiple sexual partners
- Adopting appropriate family planning measures other than use of oral contraceptives and avoid multiple pregnancies,
- Maintaining genital hygiene
- Healthy and nutritional food habits
- Active and Healthy life style

## Treatment

Cone biopsy, Hysterectomy and Radiation therapy.

## AYURVEDIC MANAGEMENT

(To be taken under supervision of Registered Ayurvedic physician)

## Line of Treatment

### Systemic Treatment:

- **Samshodhana Chikitsa:** Medical, Para medical and Surgical
- **Shamana (Palliative) treatment**
- **Rasayana Chikitsa**

### Local Treatment:

- Alepa (external application of medicated paste), Parishek (pouring medicated liquids), Abhyanga (oil massage), Upanaha (Poultice), Agni karma(Cauterization), Kshara karma(Caustic Therapy)

### Ayurveda could offer

- Symptom management as per need
- Management of side effects of Chemo/Radio Therapy
- Improvement of Quality of Life

### Some general measures to improve the Quality of life:

**Palliative treatment** can be used as an add-on therapy to relieve from side effects like reduced resistance to infection, loss of appetite, nausea, vomiting, and lack of energy in patients who are undergoing chemo/radio therapy. Ashwagandha churna, Avipathikar churna, Chitrakadi vati, Hingwshtak churna etc. are beneficial in the above mentioned conditions.

**Rasayana (Rejuvenatory) therapy** can be beneficial as these measures can improve general well being and can act as immunity boosters to promote Health & Wellness. Herbs such as Ashwagandha, Shatavari, Amalaki, Guduchi, Bala are beneficial.



Ashwagandha



Guduchi



Amla



Shatavari

**Some beneficial Single drugs:** Guduchi, Haridra, Lasuna, Shigru, Ardraka, Talisapatra, Ashwagandha, Krishna jeeraka, Kanchanara, Bhallatak, Haritaki, Devadaru, Manjishta, etc. are among the various plants having scientific evidence of anticancer property.

**Compound Formulations:** Chyawanprash, Bhallatak Rasayana, Brahma Rasayana, Triphala Rasayana, Navjeeven ras, Kamdudha ras, Triphala ghrita etc.

## PREVENTIVE MEASURES

- Stop using tobacco in all forms
- Avoid consuming alcohol
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- Choose predominantly plant based diets rich in fruits and vegetables
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- Engage in regular physical activity
- Maintain optimum weight for height and age



**Note:**

- 1. Medication is to be taken strictly under supervision of Registered Ayurvedic physician.**
- 2. Visit National Institutes/ CCRAS Research Centres for necessary consultation.**  
([www.ccras.nic.in](http://www.ccras.nic.in))

## FREQUENTLY ASKED QUESTIONS(FAQs)

### **What is Cancer?**

A disease caused by an uncontrolled division of abnormal cells in a part of the body.

### **What causes cancer?**

There are a number of chemical, physical and biological agents that have been shown to trigger the mistakes in the cell blueprint that cause cancer. These are called carcinogens and include tobacco, ultraviolet radiation and asbestos.

### **Are Cancers preventable?**

Balanced diet, Healthy & active Life Style and early screening methods can prevent a number of cancers from taking a serious stage and treatable.

### **Can cancer be successfully treated?**

Many different forms of cancer can be successfully treated, depending on the stage at which they are diagnosed, the location of the tumor and its size. Many people diagnosed with cancer are successfully treated and continue to lead happy, productive lives.

### **What are the different types of cancer treatment?**

The three most common forms of cancer treatment are surgery, chemotherapy and radiation therapy.

### **When is chemotherapy used as treatment option?**

Chemotherapy will be used anytime once cancer cells are diagnosed in the body's circulation. Chemotherapy would be used to keep the cancer from spreading.

### **How long do treatments last?**

Radiation treatments may last one week or less or up to several months. It depends on the treatment path chosen and whether or not the oncologist recommends more than one form of treatment.

### **Are there special doctors for cancer treatment?**

Yes, a doctor who specializes in the treatment of cancer is called an Oncologist.

### **Do all betel nut or tobacco chewers get oral cancer?**

Betel nut and tobacco chewers are definitely more likely to develop oral cancer than those who do not have this habit, but there are also other factors such as genetics, diet, environment and the person's immune system.

### **Will stopping the habit improve the condition?**

There are certain lesions seen frequently in the mouth of betel nut and tobacco chewers. These lesions may in future develop in to oral cancer. If these preceding lesions are identified in time, then stopping the habit will definitely improve the lesion or maybe even cure it.

### **Is pain an early sign of Cancer?**

Not always. Pain is usually a late symptom of cancer. People often think that persistent pain such as headache or constant pain in the region of the face means cancer, but this is rarely the case. However pain should not be ignored.

### **What are the chances of a female having Cervical cancer, if her mother had Cervical cancer?**

Cervical cancer is caused by many factors. Unlike breast cancer which can be inherited, Cervical cancer is not known to be inherited.

### **Is Cervical smear or Pap smear painful?**

No, Pap smear test is not painful. There may be mild discomfort and light spotting for a day or two. If the procedure is painful or the spotting heavy, make sure there is no underlying infection.

**Is the Pap smear very accurate in detecting cancer?**

Yes Pap smear is very reliable. However no test is 100% foolproof. Many labs follow a double reporting system to check for errors.

**What should I do to prevent breast cancer?**

- a. Regular self breast examination after the age of 30.
- b. If there is a strong family history of breast cancer, one should have a regular mammogram after the age of 35.
- c. Leading a healthy lifestyle will help prevent breast cancer.

**Are all breast lumps cancerous?**

Most breast lumps are benign (not cancerous). They cannot spread outside of the breast to other organs. Fibrocystic changes usually cause most of these lumps. Fibrosis refers to excessive formation of scar-like connective tissue; cysts are fluid-filled sacs. Women with fibrocystic changes often experience breast swelling and pain. The breasts may feel lumpy and the nipple may discharge a clear or slightly cloudy green or gray fluid. Fibro-adenomas or Papillomas are common breast lumps.