

SPERMATOGENIC ACTIVITY OF *PUSHPADHANWA RASA* ON *SOLANUM XANTHOCARPUM* INDUCED INFERTILITY W.S.R HISTOPATHOLOGICAL STUDY

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Abstract

The present study is to evaluate the spermatogenic activity of Pushpadhanwa rasa on methanol extract of Solanum xanthocarpum induced infertility in albino rats. The results of this study revealed that the Solanum xanthocarpum extract is an effective antifertility drug causing a significant decrease in weight of testes and accessory reproductive organs. It also reduced the Seminefferous tubular diameter and leydig cell nuclear area. Oral administration of herbo mineral preparation (Pushpadhanwa Rasa-A, B, C) was given in 10 mg/kg dose along with solanum xanthocarpum methanol extract solution for 60 days. 3 samples of Pushpadhanwa Rasa were prepared to assess their Spermatogenic effect. Pushpadhanwa Rasa prepared traditionally with herbal triturating drugs (Pushpadhnwa rasa-A);

Pushpadhanwa rasa prepared with extract of herbal triturating drugs (Pushpadhnwa rasa-B) and another prepared without herbal constituents (Pushpadhanwa Rasa-C). All the above drugs show significant result. The spermatogenic effect was further supported by reversal of solanum Italia xanthocarpum methanol extract induced histopathological changes. Among all the three preparations, Pushpadhanwa Rasa-B proved better efficacy than the other two. Spermatogenesis was only moderate in all the groups. The caudal epididymes showed all stages of primary and secondary Spermatoocytes. The Seminefferous tubules are filled with sperm with the thickened walls. Overall analysis of the histopathological observation indicates that Pushpadhanwa rasa-C has the potential of producing moderate toxicity in liver, heart and kidney on long-term