



PATHOLOGICAL EVALUATION OF REPEATED DOSE ORAL TOXICITY STUDY OF PUSHPADHANWA IN MICE

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ABSTRACT

Ethnopharmacological Relevance: Pushpadhanwa is a potent Ayurvedic formulation manufactured as per reference of Bhaishajya Ratnavali (Vajikaran) 74/70. It is used in treatment of sexual disorder.

Objective: To determine pathological evaluation of repeated dose oral toxicity of Pushpadhanwa in mice.

Method: A 40 healthy mice of either sex (20 to 30 g) were used for this study. The animals were divided into five experimental group having eight animals in each group. The four treatment group animals were given with Therapeutic Dose (TD) of four different batch viz (A-160, Y-537, Z-138, Z-435) for consecutive days, which were equivalent to proposed human therapeutic dose (HTD) and 5th group or control group receive Carboxy Methyl Cellulose (CMC). The mice were fasted four hours prior to the terminal necropsy and body weight was recorded.

Results: The value of different hematological parameters and biochemical parameters of mice from all the batches with Pushpadhanwa (TD) was found to be comparable with those of the control group mice. The microscopic examination of tissues revealed some incidental findings such as acute congestion and round cell infiltration in liver, lungs and kidneys, hepatocyte degeneration, increased number of regenerating cells and necrosis in liver, tubular cells hyperplasia in kidneys. These changes were observed in treated as well as control group mice and were considered unrelated to exposure to the Pushpadhanwa.

Conclusion: Based on these outcomes of the present chronic study, the NOEL (No Observed Effect Level) for *Pushpadhanwa* in Wistar rats could be concluded at that of human therapeutic dose.

Keywords: Pushpadhanwa, mice, Ayurvedic Formulation, Chronic toxicity study, human therapeutic dose.