EVALUATION OF HEPATOPROTECTIVE ACTIVITY OF POLYHERBAL FORMULATION IN PARACETAMOL INDUCED HEPATOTOXICITY IN RATS

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ABSTRACT

Objectives: To Evaluate the Hepatoprotective Effect of Polyherbal Formulation in Paracetamol induced Hepatotoxicity in Rats

Material and methods: In these model of Hepatotoxicity, 42 male adult male wistar rats were divided in to 7 groups. Group-1 and Group-2 served as a Normal control and positive control respectively, Group-3 served as a standard group (Liv. 52 5.2 ml/kg) and Group-4, 5, and 6 group received polyherbal formulation with the dose of 100 mg/kg, 300 mg/kg and 500 mg/kg respectively prior to PCM and Group-7 received polyherbal formulation followed by paracetamol treatment. After the experimental period blood sample were collected for biochemical parameters and kidney was isolated for histopathological studies.

Results: Paracetamol treatment caused hepatotoxicity as evidenced by marked elevation in AST, ALT, LDH, and total bilirubin. Co-administration of polyherbal syrup with paracetamol showed decrease in AST, ALT, LDH, and total bilirubin. In addition, Histopathological studies also showed protective nature of polyherbal syrup against paracetamol induced hepatotoxicity.

Conclusion: It was observed that Polyeherbal syrup containing *Allium sativum, Ocimum sanctum, Curcuma longa, Aloe barbadensis* conferred hepatoprotective and anti-oxidant activities by histopathological and biochemical observation against paracetamol induced hepatotoxicity in rats. In the near future polyherbal syrup could lead to discovery of novel herbal combination drug for treatment of hepatotoxicity.