



ABROGATION OF CARBON TETRACHLORIDE (CCL4) INDUCED HEPATOTOXICTY BY AROGYAVARDHANI IN WISTAR RATS

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ABSTRACT

Background: From long back Arogyavardhani, a herbo-mineral preparation is used in the affections of liver & spleen disorders as an ayurvedic preparation. The present study was aimed to evaluate the hepatoprotective effect of Arogyavardhani in carbon tetrachloride (CCl4) induced liver damage in wistar rats. In the present study Arogyavardhani A (65 mg/kg, p.o) and Arogyavardhani B (65 mg/kg, p.o) were used to screen the hepatoprotective activity. Hepatotoxicity was induced by the CCl4 (3 ml/kg, p.o), and silymarin (50 mg/kg, p.o) was taken as a standard. Biochemical parameters like serum glutamate oxaloacetate transaminase (SGOT), serum glutamate pyruvate transaminase (SGPT), alkaline phosphatase (ALP), total bilirubin and direct bilirubin levels were estimated. Histapathological examination of liver samples were also done. CCl4 treated groups showed the elevated levels of biochemical parameters like SGOT, SGPT, ALP, total bilirubin, and direct bilirubin levels. In-case of Arogyavardhani treated groups significantly (*p*<0.01) prevented this hepatotoxicity. Histopathological examinations revealed the post-treatment of Arogyavardhani exhibited the protection of liver tissue from CCl4 induced hepatotoxicity. The observed results strongly support the hepatoprotective activity of Arogyavardhani against CCl4 induced hepatotoxicity.

Keywords: Arogyavardhani, CCl4, Hepatotoxicity, SGOT, SGPT.