

Hepatoprotective Activity of Ethanolic Extract of Terminalia paniculata against Anti-Tubercular Drugs (ATT) Induced Hepatotoxicity in Wistar Albino Rats

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Abstract : The aim of this research is to evaluate the hepatoprotective activity of Terminalia paniculata (Tp) against ATT induced hepatic damage in rats. Three hepatotoxic ATT drugs Isoniazid + Rifampicin + Pyrazinamide, silymarin as standard hepatoprotective drug and 0.5% carboxymethylcellulose (CMC) as a control were used. Tp extract and silymarin were administered orally with ATT drugs for 90 days. Two doses 250 and 500 mg/kg of Tp extract, ATT drugs and silymarin were administered as suspensions with 0.5% CMC. ATT treated rats showed a significant increase in aspartate transaminase, alanine transaminase, alkaline phosphatase, lactate dehydrogenase, and lipid peroxides in the serum vs. control. Treatment of silymarin and Tp (250mg/kg) extract showed hepatoprotective activity against the hepatic damage by ATT. This was evident from significant reduction in serum liver enzymes levels, and also there was a significant increase in serum proteins, albumin and total liver tissue thiols as compared to the ATT treated groups. Tp was found to possess hepatoprotective property.

Keywords : antitubercular drugs, hepatoprotective, liver enzymes, Terminalia paniculata

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