Hepatoprotective Activity of Sharbat Deenar, against Carbon Tetrachloride-Induced Hepatotoxicity in Rats

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Abstract: Polyherbal formulation Sharbat Deenar is a very popular unani medicine in Bangladesh. It is usually used for different kinds of liver disorders. In absence of reliable and inadequate hepatoprotective agents in conventional medicine, the herbal preparations are preferred for liver diseases. The present study was designed to evaluate the hepatoprotective activity of Sharbat Deenar on carbon tetrachloride (CCl₄) induced hepatotoxicity in male Long-Evans albino rats. Group I served as normal control and received neither formulation nor carbon tetrachloride. Group II received only CCl₄ 1mL/kg body weight of rat intraperitoneally for consecutive 14 days. Group III received CCl₄ 1mL/kg body weight of rat intraperitoneally and Silymarin, in dose 50mg/kg body weight of rat orally. Group IV received CCl₄ 1mL/kg body weight of rat intraperitoneally and Sharbat Deenar 1mL/kg body weight of rat for the same 14 consecutive days. At the end of the study, hepatoprotective activity was evaluated by the levels of total bilirubin, alanine aminotransferase (ALT), aspartate aminotransferase (AST) and alkaline phosphatase (ALP). Histopathological study of rat liver was also carried out. The results showed that polyherbal formulation Sharbat Deenar exhibited a significant hepatoprotective effect. Such an outcome seems to be the synergistic effect of all ingredients of tested herbal formulation. Although this study suggests that Sharbat Deenar may be used to cure or minimize various liver diseases, it needs further study to attain the clarity of mechanism and safety.

 $\textbf{Keywords:} \ polyherbal\ formulation,\ sharbat\ deen ar,\ carbon\ tetrachloride,\ silymarin,\ hepatoprotective$

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