

Effects of Ashwagandha (*Withania Somnifera*) Root Extract on Architecture of Liver Tissue against Gentamicin induced hepatotoxic rats.

Abstract

Prolonged use and higher doses of drugs, and some toxins produce hepatotoxicity. Ashwagandha (*Withaniasomnifera*) have free radical scavenging activity. It can be used as a hepatoprotective agent. This study was carried to observe the effect of Ashwagandha root extract on histology of liver against gentamicin induced hepatotoxic Wistar albino rats. Thirty-five rats were divided into control and experimental group. Control group was again subdivided into baseline control and gentamicin treated control group. Each of this group received standardized pellet for 22 consecutive days. In addition, gentamicin treated control and experimental group received gentamicin subcutaneously (100mg /kg body weight/day) for the last eight consecutive days. Experimental group also received Ashwagandha root extract (500mg/kg body weight/day; orally) for 22 consecutive days. All the animals were sacrificed on the 23rd day. Histology of liver revealed normal histological findings in 84.62% of experimental group. In conclusion, it was found that Ashwagandha may have protective effect against gentamicin induced hepatotoxicity. KEYWORDS: Histology, Hepatoprotective, Ashwagandha, Gentamicin.