

## Nephroprotective effect of *Tribulus terrestris* on gentamicin induced kidney damage

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### ABSTRACT

*Tribulus terrestris* is a perennial plant, found predominantly in India and Africa. *T. terrestris* has been widely used in the Ayurveda system of medicine for treatment of various ailments. This study is proposed to investigate the nephroprotective effect of *Tribulus terrestris* on gentamicin induced kidney damage in rats. The kidney damage was induced by the i.m injection of Gentamicin at 80 mg/kg from 6th day onwards in Groups II, III, and IV. Group I and II were kept as normal (Saline) and nephrotoxic respectively. Group III and IV were treated with *Tribulus terrestris* at 300 mg/kg and 500 mg/kg of body weight in oral route respectively, for 10 days. The blood samples were collected and estimated for Creatinine, Blood urea nitrogen (BUN), Uric acid, Total protein, Albumin and Globulin. The kidneys were collected, weighed and processed for histopathology. In the Group III (P <0.05) and Group IV (P<0.02) there was a significant reduction in the BUN, Creatinine, Uric acid, Total Protein, Albumin and Globulin levels as compared to that of Group I and II. In the sections of the kidney obtained, there was a mild degree of damage in Group IV (+), followed by Group III (++) as compared to damage in Group II (+++). There was no damage in the sections obtained from Group I, which was normal control. From the results obtained it can be concluded that the alcoholic extract of *Tribulus terrestris* showed a significant decrease in the levels of Non-Protein Nitrogen compound levels and Protein levels probably due to its antioxidant property, thus it may be an effective nephroprotector.