



Effect of hydroalcoholic extract of *Lens culinaris* against doxorubicin induced renal damage

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Abstract : The current study was designed to evaluate the nephroprotective potential of seeds of hydroalcoholic extract of seeds of *Lens culinaris* against doxorubicin- induced renal damage in male Albino Wistar rats. Nephrotoxicity was induced by single intra peritoneal injection of doxorubicin at a dose of 15mg/kg b w. Nephroprotective activity of hydroalcoholic extract of *Lens culinaris* was tested at two dose levels i.e., 200 and 400mg/kg b w. Nephroprotective activity was assessed by determining serum markers, urinary parameters, lipid peroxidation and antioxidant levels in renal tissue. Histological and immuno-histochemical studies had been carried out in the renal tissue. Doxorubicin had induced marked nephrotoxicity manifested by a significant increase in Serum creatinine, Blood urea nitrogen, Urinary total protein, lipid peroxidation and decrease in Urinary creatinine, catalase (CAT), superoxide dismutase (SOD), reduced glutathione (GSH).

The administration of extract at both dose levels restored the levels of serum cretinine, urinary creatinine,urinary total protein, LPO SOD and GSH, CAT. The protection is almost equal at both dose levels. Histological and immune histochemicalstudies also substantiated the biochemical parameters. The preset study reveals that hydroalcoholic extract of seeds of *Lens culinaris* partially ameliorated doxorubicin- induced renal damage.

Keywords: Doxorubicin, *Lens culinaris*, Lipid peroxidation, Immuno-histochemical.

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