

**NEPHRO-PROTECTIVE ACTIVITY OF AQUEOUS EXTRACT OF
AERVA JAVANICA ROOTS IN CISPLATIN INDUCED RENAL TOXICITY IN RATS**

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Summary

Aerva javanica (Amaranthaceae) is a tall and woolly under shrub found plentiful in rainy season in crevices of rocks in Gujarat state. It is possessing medicinal properties like antirheumatic, antiurolithiatic, anthelmintic, demulcent, swellings and acne disorders etc. In spite of manifold uses the plant in kidney disorders it was not evaluated for nephro-protective activity. Hence the present study provides the scientific evaluation of nephro-protective activity of aqueous extracts of *Aerva javanica* roots. Six groups of six wistar albino rats were used for cisplatin induced nephrotoxicity. In this model group-I was administered with acacia (2%) (control-1), group-II was treated with aqueous extract (control-2), group-III with cisplatin (5mg/kg), group-IV cisplatin (5mg/kg) with equivalent volume of gum acacia solution, group-V cisplatin (5mg/kg) + 200mg/kg aq. extract, group-VI cisplatin (5mg/kg) + 400mg/kg aqueous extract was used. Various parameters like body weight, blood urea, serum creatinine, serum protein, total protein, serum albumin, urine volume and pH, tissue protein, GSH and TBARS level were compared with controls on 16th day after treatment. From our study it was observed that cisplatin injury was evidenced by the elevated biochemical markers [blood urea, serum creatinine, total protein and serum albumin, urine volume, urine P^H] and histopathological features of acute tubular necrosis. The aqueous extract at the dose level of 400 mg/kg body weight was found to normalize the elevated biochemical markers and bring about a marked recovery in kidneys as evidenced microscopically.

Key words: Nephro-protective, *Aerva javanica*, aqueous extract, Cisplatin

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