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Ganoderic Acid as drug therapeutics in prevention of Cisplatin Induced Acute Kidney Injury in rats

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Objectives:

Cisplatin is one of the most commonly prescribed drugs for the diagnosis of different types of cancer. However, nephrotoxicity is restricted to its use. This study investigated the effects of Ganoderic acid (GA) on cisplatin-induced kidney toxicity in rats.

Methods:

Fifty-six male albino rats from Wistar have been randomly split into 8 classes. Controls were in Classes 1-3, 0.9 percent saline and GA doses 1 and 2 respectively. Groups 4-8 were given cisplatin. Two groups received GA pre-treatment, and two other received GA pre-and post-treatment. Samples of blood have been collected and all animals have been sacrificed.

Results:

For histopathological analysis, kidneys were harvested. GA significantly raised blood levels of creatinine and urea, the extent of histopathological injury to the kidney, and mortality in all cisplatin classes except for group 7, which earned small GA dose pre-and post-treatment. Mortality and serious histopathological renal lesions established renal toxicity.

Conclusions:

These results show that the GA had a protective effect on nephrotoxicity caused by cisplatin.