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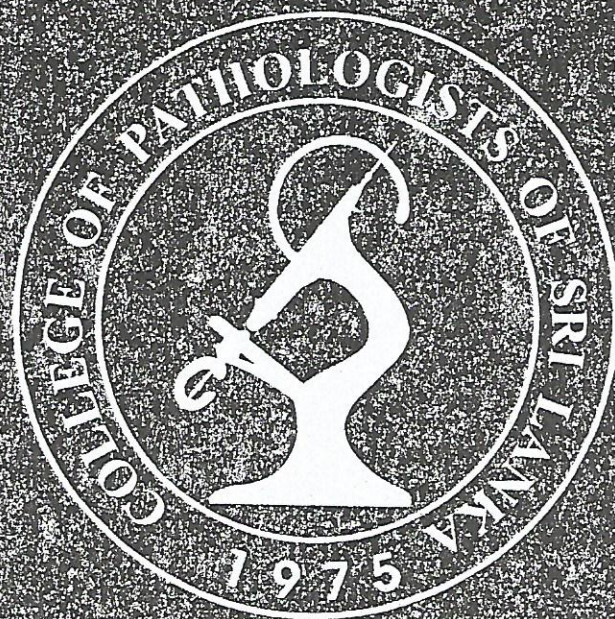


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Oral presentation 8**Paracetamol induced hepatic necrosis in mice: protective effect of *Asteracantha longifolia*.**

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Background: Management of hepatotoxicity caused by paracetamol poisoning is a major problem in developing countries and the drugs used for it are either not available, expensive or can cause serious adverse effects. Hepatoprotective drugs from plants sources seem to be an attractive alternative.

Objective: To evaluate the preventive and curative effect of *Asteracantha longifolia* (Neeramulliya) against paracetamol induced hepatic necrosis in mice.

Method: Healthy, ICR mice were divided into six groups of 20 animals in each. Normal control and drug control groups were dosed with distilled water and *Asteracantha* extract (0.9g/kg) respectively. Paracetamol control group received 300mg/kg orally. N-acetyl cysteine (500mg/kg) was given as the positive control. Two treatment regimes, pre-treatment and post-treatment with the plant extract were carried out. Blood samples were collected for biochemical analysis of serum ALT, AST and ALP and liver tissue was collected for the determination of liver reduced glutathione level and histopathological assessment of liver damage. Results were analyzed against the paracetamol control group using Student's t-test.

Results: Macroscopically, the liver appeared dark and congested in the paracetamol control group. Histologically, it showed confluent necrosis with vacuolation, ballooning degeneration and massive congestion in the surviving parenchyma. In *Asteracantha* pre-treated mice, histopathological evidence of reversible cell injury was seen but no necrosis was present. Biochemical analysis clearly complements results from the histopathological observations.

Conclusion: *Asteracantha longifolia* is an effective hepatoprotectant.

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