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ALLEVIATION OF LIVER DYFUNCTION BY *PAVETTA INDICA* AND *OSBECKIA OCTANDRA*

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Pavetta indica and *Osbeckia octandra* are two types of medicinal plants commonly considered by many traditional medical practitioners to be effective in the treatment of liver dysfunction. Of the two, *Osbeckia* is thought to be the better hepatotonic. However, to date, there is no proper scientific basis for these beliefs. Investigations have therefore been carried out to find (a) if leaf extracts of either *Pavetta* or *Osbeckia* could truly offer protection against liver injury mediated by the hepatotoxic carbon tetrachloride (CCl_4), and (b) if *Osbeckia* is indeed a better hepatotonic than *Pavetta*. The leaf extracts were prepared by liquidizing 200g leaves in 500 ml distilled water and the final volume reduced, by refluxing, to 100 ml.

In control rats, within 24 h of administering a single dose of CCl_4 (0.2 ml/100g body wt.), there was a marked increase in the serum levels of GPT, GOT and alkaline phosphatase. In these rats, livers showed centrilobular necrosis, fatty deposition and loss of cell boundaries. Treatment with 2.5 ml/day of either *Pavetta* or *Osbeckia* extract (before or after CCL_4 administration) markedly decreased the CCl_4 - mediated alteration in the liver histopathology as well as the serum enzymes. In pre-treated animals, the plant extract was administered orally for 3,5 or 7 days prior to CCl_4 treatment. In post-treated animals, 24 h after a single dose of CCl_4, the plant extracts were given orally for 2,4 or 6 days. The extracts by themselves had no effect on the above parameters in normal rats. Results confirming the greater effectiveness of Osbeckia as a hepatotonic were also obtained.

References

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