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Anti-Inflammatory Studies of Grewia crenata Leaves Extract in Albino Rats

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Abstract : Grewia crenata is used locally in the treatment of fractured bones, wound healing and inflammatory conditions. The anti-inflammatory activity of hydromethanolic extract of G. crenata leaves was investigated using egg albumin induced-hind paw oedema model in albino rat. The extract produced a time-dependent inhibition of egg albumin induced-hind paw oedema at 30th minutes up to 150th minutes in all the groups compared to the control. Significant reduction ($p<0.05$) of hind paw oedema was observed 150 minutes after egg albumin injection. The percentage inhibition produced by the extract at 200 mg/kg (22.1%) was comparable to that produced by 10 mg/kg indomethacin (24.9%) at the 150th minutes of post-egg albumin injection. Preliminary qualitative phytochemical analysis revealed the presence of saponins, steroids, flavonoids, anthraquinones and glycosides. The results obtained in this study suggest that Grewia crenata can be a potential source of anti-inflammatory agent and validates its use in the treatment of inflammatory conditions.

Keywords : Grewia crenata, anti-inflammatory, hind paw, oedema
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