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Effect of *Fulcaria vulgaris* hydro-alcoholic extract on carrageenan-induced paw edema in rats

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Background and objectives: The aim of the present study was to evaluate the antiinflammatory effect of Fulcaria vulgaris hydro-alcoholic extract (F.H.E.) in Carrageenaninduced models of inflammation by investigating the changes in serum levels of C-reactive protein (CRP) level in various treatment groups. Methods: Thirty male Wistar rats were divided in five groups (n=6) control, positive control group and three experimental groups treated with 200,400 and 600 mg/kg F.H.E, respectively. 1, 6, 12 and 20 h before Carrageenan injection F.H.E was administered by oral gavage. Serum CRP concentrations were tested by enzyme immunoassay. Results: The results revealed that at the time of inflammation induction, indomethacin decrease inflammation; however, F.H.E. brought about immediate amelioration of the inflammation. Moreover, as time passed different treatments continued their effect and helped in reducing the inflammation though lower doses of F.H.E. showed no significant efficiency. Furthermore, the level of CRP in all treatment groups was nearly similar to the control group implying that treatment either by indomethacin or Fulcaria vulgaris was successful in lowering CRP level to the control level and hence, reducing the consequences of inflammation. Conclusion: In addition to lowering CRP level, measurement of inflammation treated using 600 mg/kg F.H.E. showed more efficiency compared to the lower doses as well as indomethacin implying to the possibility of using this dose as a treatment suggestion for inflammation.

Keywords: carrageenan, CRP, Fulcaria vulgaris, inflammation, rat

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