

The anti-inflammatory effect of *Ficus carica* Linn. leaves in the rat air pouch model of inflammation

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Background and Aims: A study was carried out to evaluate the anti-inflammatory effect of methanolic extract of *Ficus carica* leaves in the rat air pouch model.

Methods: Male Wistar rats were anesthetized; 20 ml and 10 ml of sterile air were injected subcutaneously on the back on day 0 and day 3, respectively. On day 6, inflammation was induced by injection of 1 ml of carrageenan 1% (W/V) into pouches. One ml of the methanolic extract of *F. carica* leaves (20 & 200 mg/rat) was injected intraperitoneally at the same time as the carrageenan injected, and then for 2 consecutive days. The control rats received the same amount of saline solution. Seventy two h after the injection of carrageenan solution, the rats were sacrificed by halothane overdose. The pouches were flushed with 3 ml of PBS and vigorously massaged for 30 s. Then they were opened with a small incision and the exudates were collected and their volumes were measured. The leukocytes in the fluid were numerated using a hemocytometer, and the granulation tissue formed was dissected and weighed.

Results: The methanolic extract of *F. carica* leaves (200 mg/rat) was found to reduce significantly the volume of exudates ($P<0.05$) and the weight of granulation tissue ($P<0.01$) without any significant differences in the number of leukocytes between control and test groups. The extract which was administered at a dose of 20 mg/rat did not change inflammatory parameters in comparison with the control group.

Conclusions: The study confirms that the methanolic extract of *F. carica* leaves has an anti-inflammatory effect dose dependently.

Keywords: *Ficus carica* Leaves; Methanol Extract; Air Pouch; Carrageenan