

Anti-inflammatory activity of aqueous extract of *Mirabilis jalapa* Linn. Leaves

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ABSTRACT

Background The objective of the present study was to evaluate the anti-inflammatory activity of aqueous extract of *Mirabilis jalapa* Linn. (MJL) (Nyctaginaceae) leaves for scientific validation of the folklore claim of the plant. The leaves are used as traditional folk medicine in the south of Brazil to treat inflammatory and painful diseases. Cosmetic or dermo-pharmaceutical compositions containing MJL are claimed to be useful against inflammation and dry skin. **Methods** Aqueous extract of the leaves was prepared by cold maceration. **Results** The anti-inflammatory activity was evaluated using carrageenan and formalin-induced paw edema models in Wistar albino rats. The anti-inflammatory activity was found to be dose dependent in carrageenan-induced paw edema model. The aqueous extract has shown significant ($P < 0.05$) inhibition of paw oedema, 37.5% and 54.0% on 4th hour at the doses of 200 and 400 mg/kg, respectively. Similar pattern of paw edema inhibition was seen in formalin-induced paw edema model. The maximum percentage inhibition in paw edema was 32.9% and 43.0% on 4th day at the doses of 200 and 400 mg/kg, respectively. **Conclusion** The results of present study demonstrate that aqueous extract of the leaves possess significant ($P < 0.05$) anti-inflammatory potential.

KEYWORDS

Anti-inflammatory activity . aqueous extract . *Mirabilis jalapa* . paw edema

REFERENCES

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