

## **Royal jelly accelerates healing of acetate induced gastric ulcers in male Rats**

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### **Abstract**

**Aim:** This study examined the healing potential of royal jelly on the acetic acid induced wounds healing in male rat's gastric mucosa.

**Background:** Scientific reports suggest that, bee products can help in the wounds healing.

**Methods:** 96 adult male Wistar rats were divided into in 4 groups as follows: control, omeprazole 20 mg/kg, and royal jelly 50 and 200 mg/kg). Wound was induced in stomach mucosa of each rat with 100% acetic acid. Samples groups received omeprazole or royal jelly from 1st to 14th day after acetic ulcer induction. Gastric ulcer healing and histopathological parameters were evaluated on 4, 7, 10, 15th days after ulceration. Both descriptive and statistical analyses were used.  $P < 0.05$  was considered as significant.

**Results:** The royal jelly administration significantly reduced the depth of lesion in comparison with the control group ( $p < 0.05$ ) and attuned histopathological changes in the treatment groups. The largest healing effect was demonstrated with royal jelly on 10<sup>th</sup> treatment day, at a higher concentration (200 mg/kg).

**Conclusion:** These findings supported that royal jelly had effectively contributed to the wound healing, valid gastroprotective activity, and can be used for peptic ulcer therapy.

**Keywords:** Royal jelly, Gastric ulcer, Rat