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## Anti-inflammatory and antinociceptive activity of vanillin

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**Objective:** Vanillin is known to have antimutagenic, anti-invasive, and metastatic suppression potential. Antinociceptive property in acetic acid and antioxidant and hepatoprotective properties in carbon tetrachloride treated rats have also been demonstrated. Objective of this study is to evaluate the anti-inflammatory and antinociceptive activity of vanillin.

**Materials and Methods:** The drugs and fine chemicals were purchased from Sigma Aldrich, Ranbaxy, India and MS Pharmaceuticals, India. Experimental Rats were assigned to groups of six animals each and anti-inflammatory activity was evaluated using carrageenan induced rat paw aedema and anti-nociception was done using tail flick method. Carrageenan-induced paw edema was used to evaluate pre and post anti-inflammatory activity and tail flick method was used in the evaluation of antinociceptive activity. Two-way analysis of variance (ANOVA) followed by Student's t-test was used for statistical analysis in both the studies.

**Results:** There was significant decrease in the paw volume at 50 and 100mg/kg doses of vanillin when compared with control group. Meanwhile, an increase in percentage maximum possible effect (MPE) was seen by same doses of vanillin.

**Conclusion:** It has been concluded from the findings that vanillin possesses the anti-inflammatory and antinociceptive effect by virtue of its anti-histaminic and central analgesic activity, respectively.

### Biography

Adit Sharan has done Bachelor in Pharmaceutical Sciences from Rayat-Bahra Institute of Pharmacy, Hoshiarpur with affiliation to Punjab Technical University (Jalandhar). Currently he is working for Micro Labs Ltd., since November 2012. He is a member of FIP (International Pharmaceutical Federation), The Hague, The Netherlands.

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