

Comparison of Antinociceptive activity of Fluoxetine with Morphine in Albino Rats

[Sarasija V](#), [A Uma](#), [Y Venkatrao](#)

Dr Sarasija V, Assistant professor, Dept of Pharmacology RIMS Adilabad, Telangana State. Email: dr.sarasija@gmail.com

<http://dx.doi.org/10.18049/jcmad/238>

Abstract

Background: Pain is a complex unpleasant sensation which has both sensory and emotional components. Finding newer and more potent antinociceptive agents is an important area of research in pharmacology. We in the present study tried to compare antinociceptive activity of Fluoxetine and Morphine in albino rats. **Methods:** Model for pain was radiant heat induced pain using analgesiometer in Wister albino rats. They were divided into 5 groups of 6 animals each. Each animal was used only once in the experiment. Fluoxetine hydrochloride pure powder and Morphine sulphate were used during the study. **Results:** Fluoxetine (5mg / kg i.p.) produced significant antinociceptive action by enhancing the tail-flick latency period (7.33±1.37, 7.65±1.03, 7.50±0.84 sec.) at 15 min, 30 min, 60 min respectively in comparison to 0 minute (4.17±0.75). Fluoxetine (10mg / kg i.p.) also produced significant antinociceptive action by enhancing the tail-flick latency period (7.33±2.34, 9.17±1.33, 9.6±0.53 sec.) at 15 min, 30 min, 60 min respectively in comparison to 0 minute (4.67±0.52). The standard drug Morphine (1 mg / kg, i.p.) produced significant increase in the tail- flick latency period (7.50±0.55, 10.00 ±0.00, 10.00±0.00 sec.) at 15 min, 30 min, 60 min respectively in comparison to 0 minute (4.67±0.55). Morphine (1 mg/kg i.p.) produced significantly more antinociception than Fluoxetine (5 mg/kg & 10 mg/kg i.p.). **Conclusion:** Fluoxetine has antinociceptive effect but Morphine (1 mg/kg i.p.) has better antinociception than Fluoxetine (5 mg/kg & 10 mg/kg i.p.), suggesting that Fluoxetine is less potent antinociceptive drug than Morphine.