

Abstract

1. The antinociceptive effect in the mole-rat of morphine (1, 10, 20 or 30 mg/kg) and nefopam (10 or 20 mg/kg) was studied. 2. In the hotplate test, morphine had no analgesic effect. A reduced response latency after morphine (10 and 20 mg/kg) could possibly be explained by hyperactivity and excited behaviour. 3. After morphine (10, 20 and 30 mg/kg) most of the animals died after fighting when kept in colony cages. Aggressive behaviour and death was prevented by naloxone, or by keeping the animals in single cages. 4. Nefopam (20 mg/kg) significantly increased the latency for the nociceptive response. 5. It was concluded that in the mole-rat, opioid systems in the CNS may not be involved in the regulation of nociception, but in the regulation of agonistic and motor behaviour.