Analgesic effects of intracerebroventricular administration of calcium channel blockers in mice

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1. 1. The antinociceptive action of calcium channel blockers administered intracerebroventricularly to mice using the acetic acid writhing test was studied. 2. 2. The drugs produced dose-dependent inhibition of the number of writhes induced by the intraperitoneal administration of 10 ml/kg of 0.6% acetic acid. 3. 3. The CaCBs may be ranked from most to least potent as follows: verapamil > nimodipine > diltiazem > flunarizine > nifedipine > cinnarizine. 4. 4. Since naloxone pretreatment was not able to inhibit the antinociception produced by CaCBs an opioid mechanism of action is excluded. 5. 5. It is suggested that CaCBs can induce analgesia through a decrease in cellular Ca2+ availability, increasing the nociceptive threshold.