

Effects of calcium channel antagonists and Bay K 8644 on the analgesic response to pentazocine and U 50488H

Quijada, L.

Germany, A.

Hernández, A.

Contreras, E.

1. 1. The effects of diltiazem, nifedipine and verapamil and the calcium channel agonist Bay K 8644 on the analgesic responses to the subcutaneous (s.c.) or intracerebroventricular (i.c.v.) administration of pentazocine and U 50488H were investigated in mice. 2. 2. The three calcium channel antagonists and Bay K 8644 reduced the number of writhes induced by the intraperitoneal administration of acetic acid. 3. 3. The analgesic responses to the low doses of pentazocine (s.c.) were additive with the effects of diltiazem, nifedipine or Bay K 8644; while, in contrast, the higher doses produced underadditive responses. Only verapamil increased the effects of the i.c.v. administration of the opioid. 4. 4. The effects of U 50488H (s.c.) were additive with those of diltiazem and Bay K 8644; verapamil only increased the response to the lower dose of the opioid. Nifedipine plus pentazocine always induced underadditive responses. The i.c.v. effects of U 50488H were only increased by verapamil. 5.