

# Analgesic effect of benzodiazepines and flumazenil

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1. 1. In the present work the analgesic effect of benzodiazepines (BZD) and flumazenil (FLU) using the writhing test in mice was studied. 2. 2. Intracerebroventricular administration of BZD exhibited a dose-dependent antinociceptive effect when compared to control value. 3. 3. Intracerebroventricular administration of FLU induced a dose-dependent antinociceptive action that was not antagonized by naloxone (NX). 4. 4. BZD administered as subcutaneous pellets produced an antinociceptive action in the writhing test, when compared to control mice, only at relative high doses and was partially antagonized by naloxone. 5. 5. These findings could be explained assuming that NX and/or FLU have partial agonist properties in a common receptor which mediates the antinociceptive action. 6. 6. The antinociceptive action of BZD could be related to an increased release of adenosine, which by itself has analgesic effects. © 1992.