

Previous administration of naltrexone did not change synergism between paracetamol and tramadol in mice

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In the treatment of acute and chronic pain the most frequently used drugs are nonsteroidal anti-inflammatory drugs (NSAIDs), e.g., paracetamol; opioids, e.g., tramadol, and a group of drugs called coanalgesics or adjuvants (e.g., antidepressants, anticonvulsants). The aim of this work was to determine the nature of the interaction induced by intraperitoneal or intrathecal coadministration of paracetamol and tramadol. The type of interaction was evaluated by means of isobolographic analysis, using the acetic acid writhing test as an algometer in mice. In addition, the involvement of opioid receptors in the interaction was studied using naltrexone, a non-selective opioid receptor antagonist. The administration of paracetamol or tramadol induced a dose-dependent antinociceptive activity in the assay. The dose-response curves were characterized by equal efficacy but different potencies, being i.t. paracetamol 11.84 times more potent than i.p. paracetamol, and i.t. tramadol 3.54 times mo