

Synergism between COX-3 inhibitors in two animal models of pain

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Objective and design: The antinociception induced by the intraperitoneal coadministration in mice of combinations of metamizol and paracetamol was evaluated in the tail flick test and orofacial formalin test. **Methods:** The antinociception of each drugs alone and the interaction of the combinations was evaluated by isobolographic analysis in the tail-flick and in the formalin orofacial assay of mice.

Results: Mice pretreated with the drugs demonstrated that the antinociception of metamizol and paracetamol is dose-dependent. The potency range on the antinocifensive responses for metamizol or paracetamol was as follows: orofacial (Phase II) > orofacial (Phase I) > tail flick. In addition, the coadministration of metamizol with paracetamol induced a strong synergistic antinociception in the algometer assays. Both drugs showed effectiveness in inflammatory pain. **Conclusion:** These actions can be related to the differential selectivity of the drugs for inhibition of COX isoforms and also to