Introduction and Goals

One strategy to improve the therapeutic utility of opioids is to co-administer with other analgesic agents, such as Phα1β toxin, looking for reducing side effects and improving analgesy. This work aims to test whether the in vivo antinociceptive interaction of methadone and Phα1β is subadditive, additive or synergistic.

Methodology

Von Frey Test (Measures)
• Basal – Day 1
• Day 7
• Day 14
(Before and After Treatment)

Melanoma Model - Results

Isobolographic Analysis Reveals Synergic Analgesic Interaction Between Methadone and Phα1β In A Model of Cancer Pain in C57BL/6J Mice

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Antinociceptive doses of Phβ1 and Methadone (alone or in combination) cause no alterations on motor performance but reduces intestinal travel.

Conclusions

Our data show that a synergism occurred when s.c methadone was administered simultaneously with l1 Phβ1 suggesting potency on the analgesic effect of these drugs when both are added together even in lower doses.

Support

Drugs in a morphine tolerance condition.
Phβ1, Methadone or Phβ1 + Methadone at doses necessary to cause 50% of M.P.E. in the mechanical hyperalgesia assays were capable to restore the morphine antinociceptive effect in the tail-flick test. Data are expressed as mean ± SEM (n = 6 animals per group). p<0.05 was considered statistically significant compared to morphine challenging dose at day 1 (One-way ANOVA, with Bonferroni post-test).