EFFECT OF NONSELECTIVE AND SELECTIVE OPIOID RECEPTORS ANTAGONISTS ON ANTINOCICEPTIVE ACTION OF ACETAMINOPHEN [PART III]

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The influence of naloxone (NAL), a competitive antagonist of μ, κ, δ and σ receptors; D-Phe-Cys-Tyr-D-Trp-Orn-Thr-Pen-Thr-NH₂ (CTOP), selective antagonist of μ-opioid receptors; nor-binaltorphimine (NOR-BNI), a potent and highly selective κ opioid receptor antagonist; naltrindole (NTI), a δ-opioid receptor antagonist and naltriben (NTB), a highly selective δ₂-opioid receptor antagonist on antinociceptive action of acetaminophen (ACETA) was studied in rats.

NAL administered intraperitoneally (ip) or intracerebroventricularly (icv), and CTOP and NOR-BNI administered icv, markedly decreased the antinociceptive activity of the high dose of ACETA (400 mg/kg). Pretreatment with NTI (sc), as well as with naloxone (it), and NTB (it) slightly but significantly attenuated the ACETA antinociception.

The possible involvement of the opioidergic systems in antinociceptive activity of ACETA is discussed.

Key words: acetaminophen, antinociception, opioidergic systems

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