

Abstract

Opioid receptors interact with opiate compounds, causing the inhibition of neuroexcitability. The activation of signaling pathway of opioid receptors plays crucial role in the treatment of chronic and cancer pain. Summary of the general knowledge about opioid receptors and about the development of tolerance is in the first part of this work. Next part of the thesis concerns on ontogenesis of opioid receptors and other components related to the opioid signaling pathways as age seems to have an immense influence on molecules within and related to the opioid signaling. Finally, last part of this work collects data about the influence of morphine during ontogenesis as morphine is one of the most used opiate compound used in clinical treatment.

Key words

Opioid receptor, signalization, ontogenesis, addiction, tolerance, morphine