

Methadone

Yael Rodriguez
4th hour

Place of Origin

Methadone, the first pharmacological treatment for heroin addiction, was pioneered 50 years ago by Rockefeller University's Mary Jeanne Kreek



Coming to action

Methadone was introduced into the United States in 1947 as an analgesic

Analgesic is the a way to relieve pain.



About methadone

Methadone can control the dull roar of the pain; it blocks the brain's opiate receptors and can curb cravings for heroin or morphine without offering the intense, short-haired blast of euphoria and drowsiness that comes with other opiates.



opiate receptors

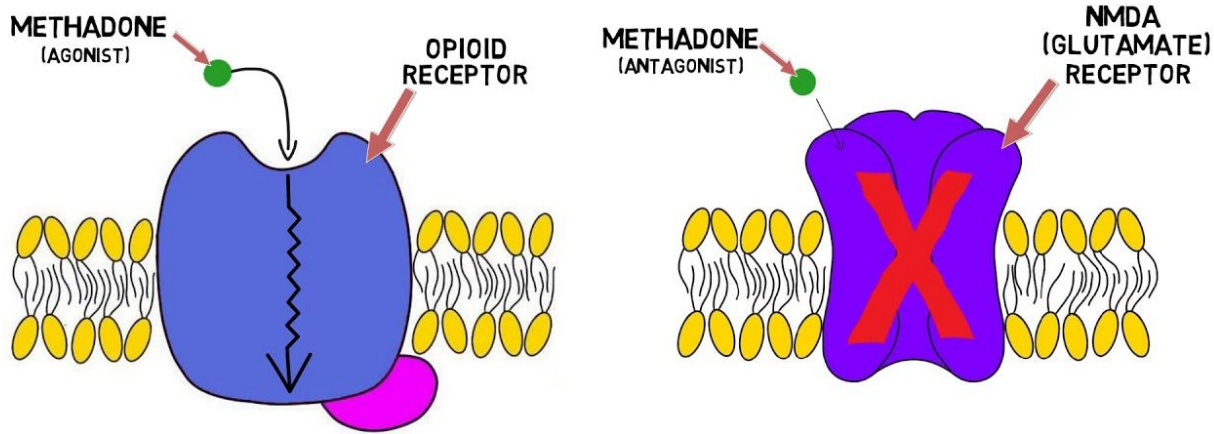
Opioid receptors are part of the class A of G-protein coupled receptors and the target of the opiates, the most powerful analgesic molecules used in clinics. During a protracted use, a tolerance to analgesic effect develops resulting in a reduction of the effectiveness.



Action

METHADONE

COMMONLY USED TO TREAT OPIOID USE DISORDER



Opioid

Opioid drugs activate receptors that block pain signals from reaching the brain. When this happens, the body tries to overcome these blocked signals by activating other pain signals, which can lead to hypersensitization.



Location

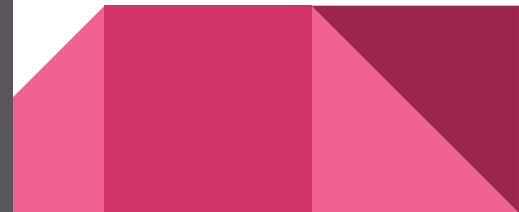
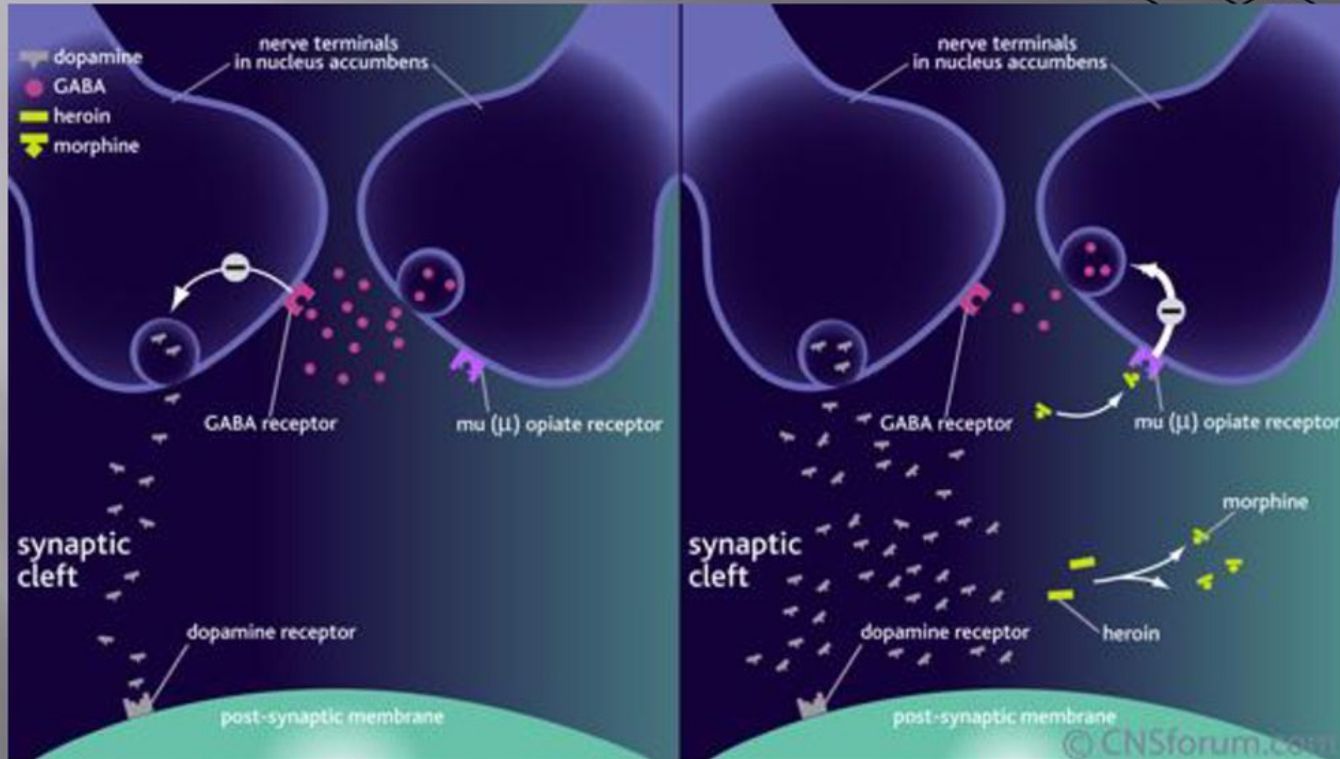


Mechanism of Action Methadone

Mechanism of Action Methadone hydrochloride is a mu-agonist; a synthetic opioid analgesic with multiple actions qualitatively similar to those of morphine, the most prominent of which involves the central nervous system and organs composed of smooth muscle.



Mechanism of Action of Methadone HCl



Chemical compound

