

Pharmacology: A Patient-Centered Nursing Process Approach (Kee, Pharmacology)

Introduction

In this article, you'll learn about Morphine sulfate nursing implications and patient teachings. Also, its dosage, mechanism of action, indication, side effects.

Morphine is a prototype opioid. Which is derived from the sap of the seed pods of the opium poppy plant. Codeine is a similar but less potent opium-derived medication.

Opioid analgesics work primarily on the central nervous system. It mostly activates μ -opioid receptors (MORs) and only slightly activates kappa (κ).

Mu receptor activation causes analgesia, respiratory depression, euphoria, and sedation. While kappa opioid receptors (KORs) only produces analgesic and sedative effect without respiratory depression and euphoria.

Morphine also has an antitussive effect which decreases coughing by acting on cough centers in the medulla of the brainstem.

Morphine sulfate is an opium alkaloid primarily used to treat moderate to severe acute or chronic pain. It is classified as a schedule-II controlled substance.

The opioid antagonist naloxone (Narcan) is an antidote for morphine overdose.

Generic Name: Morphine Sulfate

Brand Name(s): Arymo ER, Astramorph PF, Doloral (CAN), Duramorph PF, Infumorph, M-Eslon (CAN), Mitigo, MorphaBond ER, Morphine LP Epidural (CAN), MS Contin, Kadian, Oramorph SR, MS IR, Ratio-Morphine (CAN), Simplist, Statex (CAN)

Morphine Sulfate Class and Category

Pharmacologic class: Opioid agonist

Therapeutic class: Opioid analgesic

Pregnancy category: C

Controlled substance schedule: II

Morphine Sulfate Dosage

Adults

PO: tabs: 10 to 30 mg, q4h, PRN.

tabs: 10 to 30 mg, q4h, PRN. PO: sol: 10 to 20 mg, q4h, PRN.

P

sol: 10 to 20 mg, q4h, PRN. PO: SR tabs: 15 to 30 mg, q12h, PRN.

SR tabs: 15 to 30 mg, q12h, PRN. IV injection: 0.1 to 0.2 mg/kg, slow IV, q4h, PRN.

0.1 to 0.2 mg/kg, slow IV, q4h, PRN. IV Infusion: 0.1 to 0.15 mg/kg/hr.

0.1 to 0.15 mg/kg/hr. IM/SubQ: 10 mg, q4h, PRN.

10 mg, q4h, PRN. Epidural: Initially, 5 mg as a single dose. 1 to 2 mg PRN. Maximum: 10 mg/24 hr.

Initially, 5 mg as a single dose. 1 to 2 mg PRN. Maximum: 10 mg/24 hr. Intrathecal: 0.2 to 1 mg, STAT.

0.2 to 1 mg, STAT. PR: 10 to 20 mg, q4h, PRN.

Children

PO: 0.1 to 0.5 mg/kg, q4-6h, PRN.

0.1 to 0.5 mg/kg, q4-6h, PRN. IM/SubQ: 0.05 to 0.2 mg/kg q2-8h PRN; maximum dose:

Reference

[Nursing Pharmacology Notebook: Blank Medication Template Notebook](#)

[Study Guide for Pharmacology and the Nursing Process](#)