

Pethidine

Pethidine, also known as meperidine, is a synthetic opioid analgesic medication. It is primarily used for the relief of moderate to severe pain. Here's the information you requested:

Drug classification:

Pethidine belongs to the class of medications known as opioid analgesics or narcotics.

Desired effect:

The primary desired effect of pethidine is pain relief. It can be used for a variety of conditions such as postoperative pain, labor pain, and other acute or chronic painful conditions.

Mechanism of action:

Pethidine acts by binding to opioid receptors in the central nervous system (CNS). It primarily activates the mu-opioid receptors, which reduces the transmission of pain signals and alters the perception of pain in the brain.

Most common adverse effects:

Adverse effects associated with pethidine use can include:

1. **Nausea and vomiting:** Pethidine has a higher incidence of causing nausea and vomiting compared to other opioids.
2. **Sedation and drowsiness:** Pethidine can cause drowsiness and sedation, which may impair cognitive and motor functions.
3. **Respiratory depression:** Like other opioids, pethidine can suppress respiratory function, especially at higher doses.
4. **Constipation:** Opioids commonly cause constipation by slowing down gastrointestinal motility.
5. **Itching and rash:** Some individuals may experience itching or develop a rash as a side effect of pethidine.

Most common side effects:

Some common side effects of pethidine may include:

1. Dry mouth
2. Sweating
3. Dizziness
4. Headache
5. Confusion
6. Weakness
7. Euphoria or dysphoria (mood changes)

Antidote:

The primary antidote for pethidine overdose or toxicity is naloxone, an opioid receptor antagonist that can reverse the effects of opioid overdose.

When it should be administered:

Pethidine should be administered as prescribed by a healthcare professional. The timing and dosage will depend on the individual's condition and pain severity

Nursing responsibilities:

1. Assessing the patient's pain level before and after administering pethidine.
2. Monitoring vital signs, including respiratory rate, heart rate, and blood pressure, especially during the initial doses or when increasing the dose.
3. Monitoring for adverse effects such as nausea, vomiting, sedation, and respiratory depression.
4. Educating the patient and family about potential side effects, precautions, and signs of opioid overdose.
5. Ensuring proper documentation of the medication administration, including dosage, time, and patient response.

Findings that prevent administration:

Pethidine should not be administered or should be used with caution in the following situations:

1. Hypersensitivity or known allergy to pethidine or other opioids.
2. Severe respiratory depression or compromised respiratory function.
3. History of seizures or increased intracranial pressure.
4. Use of monoamine oxidase inhibitors (MAOIs) within the past 14 days, as it can lead to serotonin syndrome.
5. Pregnancy, especially near-term or during labor, as pethidine can affect the newborn.