

Pethidine

Class: Analgesic, opioid.

Indications: Management of moderate-to-severe pain; adjunct to anesthesia and preoperative sedation

Unlabeled: Reduce postoperative shivering; reduce rigors from amphotericin B (conventional)

Available dosage form in the hospital: Solution, Injection, as hydrochloride: 50 mg/mL (1 mL); 100 mg/2 mL.

Dosage: Note: The American Pain Society (2008) and ISMP (2007) do not recommend meperidine's use as an analgesic. If use in acute pain (in patients without renal or CNS disease) cannot be avoided, treatment should be limited to ≤ 48 hours and doses should not exceed 600 mg/24 hours. Oral route is not recommended for treatment of acute or chronic pain. If I.V. route is required, consider a reduced dose. Patients with prior opioid exposure may require higher initial doses.

-Pain (analgesic): Oral, I.M., SubQ: 50-150 mg every 3-4 hours as needed

-Preoperatively: I.M., SubQ: 50-150 mg given 30-90 minutes before the beginning of anesthesia

-Obstetrical analgesia: I.M., SubQ: 50-100 mg when pain becomes regular; may repeat at every 1-3 hours

-Postoperative shivering (unlabeled use): I.V.: 25-50 mg once (Crowley, 2008; Kranke, 2002; Mercandante, 1994; Wang, 1999)

Geriatric

Avoid use (American Pain Society, 2008; ISMP, 2007).

Renal Impairment:

Avoid use in renal impairment (American Pain Society, 2008; ISMP, 2007).

Hepatic Impairment:

Use with caution in severe hepatic impairment; consider a lower initial dose when initiating therapy. An increased opioid effect may be seen in patients with cirrhosis; dose reduction is more important for the oral than I.V. route.

Common side effects: Cardiovascular: Bradycardia, cardiac arrest, circulatory depression, hypotension, palpitation, shock, syncope, tachycardia

Central nervous system: Agitation, confusion, delirium, disorientation, dizziness, drowsiness, dysphoria, euphoria, fatigue, flushing, hallucinations, headache, intracranial pressure increased, lightheadedness, malaise, mental depression, nervousness, paradoxical CNS stimulation, restlessness, sedation, seizure (associated with metabolite accumulation), serotonin syndrome

Dermatologic: Pruritus, rash, urticaria

Gastrointestinal: Abdominal cramps, anorexia, biliary spasm, constipation, nausea, paralytic ileus, sphincter of Oddi spasm, vomiting, xerostomia

Genitourinary: Ureteral spasms, urinary retention

Local: Injection site reaction (including pain, wheal, and flare)

Neuromuscular & skeletal: Muscle twitching, myoclonus, tremor, weakness

Ocular: Visual disturbances

Respiratory: Dyspnea, respiratory arrest, respiratory depression

Miscellaneous: Anaphylaxis, diaphoresis, histamine release, hypersensitivity reactions, physical and psychological dependence

Pregnancy Risk Factor: C