

NAME OF DRUG

meperidine HCl

CLASSIFICATION

Narcotic analgesic

ALTERNATE NAMES

pethidine, DEMEROL

INDICATIONS

- for short-term management of moderate to severe pain if normal renal, hepatic, and CNS function **and** alternative opioids are contraindicated
- Restricted to treatment of drug- or blood-induced rigors and post-operative shivering

RECONSTITUTION AND STABILITY

- stable at room temperature

COMPATIBILITY

- compatible with D5W, D10W, D5S, RS, LR, or NS
- compatible via Y-site with amikacin, ampicillin, calcium gluconate, cefazolin, cefotaxime, ceftazidime, ceftizoxime, ceftriaxone, cefuroxime, clindamycin, cloxacillin, cotrimoxazole, dimenhydrinate, diphenhydramine, dopamine, erythromycin lactobionate, fluconazole, gentamicin, heparin, hydrocortisone, insulin regular, magnesium sulfate, methylprednisolone, metoclopramide, metronidazole, MVI, ondansetron, penicillin G, piperacillin-tazobactam, potassium chloride, potassium phosphate, ranitidine, ticarcillin-clavulanate, tobramycin, vancomycin
- see Appendix X for syringe compatibilities

ROUTES OF ADMINISTRATION

- IM
- SC intermittent
- IV direct: - diluted to 10 mL with sterile water for injection or NS; maximum concentration 10 mg/mL; administer slowly over at least 1 minute
- IV intermittent - in 50 mL IV solution over 15 to 30 minutes
- IV infusion: - for pain control and as a supplement to anaesthesia at a concentration of 1 mg/mL (see policy for administration of Continuous Narcotic Infusion)

VH & HSC ADMINISTRATION POLICY

- E - Direct IV route can be administered by nurses on general nursing units provided a venous access has been established and according to policies and recommendations stated in this manual.
- H - IV infusion administration rate **MUST** be controlled by an automated infusion control device (see Policy for Administration of Continuous Narcotic Infusion).

NAME OF DRUG (cont)
meperidine HCl

ALTERNATE NAMES
pethidine, DEMEROL

DOSAGE

Should be individualized based on patient response and tolerance

Analgesia

Usual:- IV direct: 10 to 30 mg given over at least 1 minute, titrated every 6 to 10 minutes until analgesia achieved (usual maximum 60 mg/hour), then give IM, SC, IV intermittent or infusion:

- IM or SC: 25 to 100 mg q3 to 4 hours
- IV intermittent: 25 to 100 mg administered over 15 to 30 minutes q2 to 4h
- IV infusion: 10 to 30 mg loading dose, followed by 5-20 mg/hour; titrate to response; maximum 600 mg/24 hours with normal renal function

Dosage Adjustments: - reduction when patients are receiving other CNS depressants
- reduction in hepatic insufficiency, renal failure
- geriatric patients should be initiated with reduced doses and titrated individually

Drug- or Blood-Induced Rigors or Post-op Shivering: 25 to 50 mg IV

See Appendix XI for equianalgesic opioid dosages

POTENTIAL HAZARDS OF PARENTERAL ADMINISTRATION

- respiratory depression, cardiovascular depression (increased with rapid IV injection)
- antidote - naloxone
- orthostatic hypotension, tachycardia, vasodilation, sedation, dizziness
- patients with renal dysfunction should not receive multiple doses as accumulation of the toxic metabolite, normeperidine, can occur causing CNS excitation (e.g. twitching)
- repeated SC administration may cause local tissue irritation, pain and induration

IMPORTANT IMPLICATIONS

- patient should be supine during injection and observed closely
- use with caution in patients with cranial injuries, respiratory insufficiency, convulsive disorders, cardiac arrhythmias, or hypersensitivity
- contraindicated in patients who have received monoamine oxidase inhibitors within 14 days

Monitoring Parameters:

Therapeutic: analgesia and frequency of breakthrough pain
Toxicity: respiratory rate, sedation scale

