droperidol (droe-per-i-dole)

Dosage

**Indications**
Used to produce tranquillization and as an adjunct to general and regional anesthesia.

**Action**
Similar to haloperidol—alters the action of dopamine in the CNS. Therapeutic Effects: Tranquilization. Suppression of nausea and vomiting in selected situations.

**Pharmacokinetics**
Absorption: Well absorbed following IM administration.
Distribution: Appears to cross the blood-brain barrier and placenta.
Metabolism and Excretion: Mainly metabolized by the liver. Only 10% excreted unchanged by the kidneys.
Half-life: 2.2 hr.

**TIME/ACTION PROFILE (sedation)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM, IV</td>
<td>3–10 min</td>
<td>30 min</td>
<td>2–4 hr</td>
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</table>

*Listed as duration of tranquilization; alterations in consciousness may last up to 12 hr

**Contraindications/Precautions**
Contraindicated in: Hypersensitivity; Known intolerance; Angle-closure glaucoma; Bone marrow depression; CNS depression; Severe liver or cardiac disease; Known or suspected QT prolongation.

Use Cautiously in:
- Geriatric, debilitated, or severely ill patients (smaller doses should be used);
- Diabetic patients;
- Respiratory insufficiency;
- Prostatic hypertrophy;
- CNS tumors, Intestinal obstruction; Seizures (may lower seizure threshold); Severe liver disease;
- Pregnancy, lactation, and children <2 yr (although safety not established, droperidol has been used during cesarean section without respiratory depression in the newborn); Age <65 yr, concurrent benzodiazepines, volatile anesthetics, IV opioids (may increase risk of serious arrhythmias); and fewer initial doses.

**Adverse Reactions/Side Effects**
CNS: SEIZURES, extrapyramidal reactions, abnormal EEG, anxiety, confusion, dizziness, drowsiness, agitation, agitation, hyperactivity, mental depression, excitement, headache, fatigue, nausea, vomiting, anorexia, constipation, dry mouth, insomnia, restlessness, tremor, shivering.
CV: Arrhythmias (including torsades de pointes), QT prolongation.
EENT: Blurred vision, dry eyes.
Resp: Bronchospasm, laryngospasm.
GI: Constipation, dry mouth.
Misc: Chills, fever, bradycardia, sweating.

**Interactions**
Drug-Drug: Additive hypotension with antihypertensives or nitrates. Additive CNS depression with other CNS depressants, including alcohol, antidepressants, antipsychotics, tranquilizers, and other sedatives. Concurrent use of drugs known to prolong QT interval (risk of potentially life-threatening arrhythmias).
Drug-Natural Products: Concurrent use of kava-kava, valerian, chamomile, or hops can cause CNS depression.

**Route/Dosage**

**Premedication/Use Without Premedication in Diagnostic Procedures**

**IV (Adults):** 2.5 mg initially. 30–60 min prior to induction of anesthesia, additional doses of 1.25 mg may be needed, but should be undertaken with caution.

**IM, IV (Adults):** 0.1 mg/kg maximum initial dose.

**Adjunct to General Anesthesia**

**IV (Adults):** 2.5 mg additional doses of 1.25 mg IV may be needed, but should be undertaken with caution.

**IM, IV (Children 2–12 yr):** 0.1 mg/kg maximum initial dose.
Adjunct in Regional Anesthesia

IM, IV (Adults): 2.5 mg.

Antiemetic

IV (Adults): 0.5–1.25 mg q 4 hr as needed (unlabeled).

NURSING IMPLICATIONS

Assessment

- Monitor BP and heart rate frequently during therapy. Report significant changes immediately. Hypotension may be treated with parenteral fluids if hypovolemia is a causative factor. Transient arrhythmias (tachycardia, phasic hypotension) may be needed. Avoid use of epinephrine, because paradoxical hypotension may occur.
- Assess 12-lead ECG in all patients prior to administration to determine if prolonged Q-T interval is present. Do not administer to patients with a prolonged Q-T interval. Monitor ECG prior to, during, and for 2–3 hr after treatment to monitor for arrhythmias.
- Assess patient for level of sedation following administration.
- Observe patient for extrapyramidal symptoms (dystonia, orofacial dyskinesia, extrapyramidal, anxiety) throughout therapy. Notify physician or other health care professional should these occur. An anticholinergic antiparkinsonian agent may be used to treat these symptoms.

Nausea and Vomiting:

Assess nausea, vomiting, hydration status, bowel sounds, and abdominal pain prior to and following administration.

Potential Nursing Diagnoses

Risk for injury (Side Effects)

Implementation

IV Administration

- pH: 5.5–8.8.
- Direct IV: Diluent: administration add water. Concentration: 2.5 mg/mL. Rate: Administer each dose slowly over 30–60 sec.
- Intermittent Infusion: Diluent: May be added to D5W, 0.9% NaCl, or LR. Rate: Administer by slow IV infusion. Titrate according to patient response.

- Storage Compatibility: atropine, bupivacaine, chlorpromazine, cimetidine, cyclophosphamide, dexamethasone, diphenhydramine, doxorubicin, fentanyl, hydroxyzine, meperidine, morphine, methamphetamine, nalbuphine, promethazine, prochlorperazine, promethazine, quinidine, vinblastine, vincristine.
- Storage Incompatibility: benzyl alcohol, heparin, leucoencarnine calcium, methylprednisolone, newport.
- Y-Site Compatibility: amphotericin B, asparaginase, atorvastatin, bleomycin, cisplatin, cyclophosphamide, daunorubicin, dexamethasone, docetaxel, doxorubicin, etoposide, fludarabine, granisetron, hydrocortisone sodium succinate, idarubicin, ifosfamide, mitomycin, vincristine, vinorelbine.
- Y-Site Incompatibility: allopurinol sodium, amphotericin B cholesteryl sulfate complex, camptothecin, cyclophosphamide, doxorubicin liposome, etoposide, paclitaxel, potassium chloride, propofol, remifentanil, taxanes, ticarcillin, vinblastine, vincristine, vinorelbine, vitamin B complex with C.
- Additive Incompatibility: barbiturates.

Patient/Family Teaching

- Caution patient to change positions slowly to minimize orthostatic hypotension.
- Medication causes drowsiness. Advise patient to call for assistance during ambulation and transfer.

Evaluation/Desired Outcomes

- General quiescence and reduced motor activity.
- Decreased nausea and vomiting.
- Why was this drug prescribed for your patient?