Figure E1. Droperidol protocol.

DROPERIDOL (INAPSINE)

Pharmacology and actions

A. Droperidol is a butyrophenone derivative closely related to haloperidol. Droperidol produces a dopaminergic blockage, a mild alpha-adrenergic blockage, and causes peripheral vasodilation. Its major actions are sedation, tranquilization, and a potent anti-emetic effect.
B. Onset of action is 3–10 minutes after IM or IV administration with peak effect in 30 minutes. Duration of the sedative effect is 2–4 hours.

Indications

A. The primary indication is to act as a chemical restraint in patients that require transport and are behaving in a manner that poses a threat to their own well being or that of others.
B. The secondary indication is for intractable vomiting with transport time greater than 10 minutes.
C. Combative head injured patients.

Contraindications

A. Any patient
1. With a suspected acute myocardial infarction
2. With a systolic blood pressure under 100 mmHg, or the absence of a radial pulse
3. Under the age of 8 years
4. Exhibiting signs of sedation or respiratory depression
5. With known kidney or liver dysfunction
6. With known Parkinson disease

Precautions

A. Due to the vasodilation effect, droperidol can cause a transient hypotension that is usually self-limiting and can be treated effectively with position and fluids. Droperidol has also been known to cause tachycardia, which usually does not require pharmacologic intervention.
B. Some patients may experience unpleasant sensations manifested as restlessness, hyperactivity, or anxiety following droperidol administration.
C. Extrapyramidal reactions have been noted hours to days after treatment, usually presenting as spasm of the muscles of the tongue, face, neck, and back.
D. Rare instances of neuroleptic malignant syndrome (very high fever, muscular rigidity) have been known to occur after the use of droperidol.
E. Side effects have been known to be enhanced by rapid administration.
F. Droperidol will block the effectiveness of dopamine and causes a paradoxical hypotension in the presence of epinephrine.

Administration

A. Chemical restraint
1. Standing order
2. Adult dose: 2.5 mg slow IV push or IM administration.
3. After 10 minutes, if desired effect has not been achieved, contact base to consider a second dose.

B. Antiemetic
1. **Contact base for direct physician order**
2. Adult dose: 1.25 mg slow IV push or IM
3. Pediatric dose (8–14 y/o): 0.05 mg/kg slow IV push or IM

Side effects and special notes

A. Although extrapyramidal reactions have an incidence less than 1% and usually present after the pre-hospital phase, be prepared to administer 50 mg diphenhydramine IVP/IM.
B. Hypotension and tachycardia secondary to droperidol are usually self-limiting and hypotension is correctable through recumbent positioning and fluid administration. Be aware of other causes of these conditions, especially in relation to a patient that is the victim of trauma.
C. The action of droperidol potentiates the effect of sedative/tranquilizer-type medications and is relatively contraindicated in the known presence of these types of indications. In this setting, be prepared for respiratory depression, apnea, muscular rigidity to droperidol, and a reduced dose should be used. Consult with base to determine the appropriate dose.
D. IV fluids are the preferred treatment for nausea and vomiting in all children below the age of 14 years.
E. Due to droperidol's potential effect on QT interval prolongation, all patients receiving droperidol will be placed on the cardiac monitor. Though it is understood that obtaining an ECG tracing on the combative or agitated patient may be difficult, every effort should be made to do so.