



The Montgomery County Hospital District Paramedic Podcast

Episode 115: Digging Up Droperidol

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Take Home Points

- Droperidol is an anti-psychotic useful in psychiatric agitation
- An antipsychotic is often more appropriate than a dissociative agent
- Always be cautious when dosing elderly patients
- Be patient with drug effectiveness clock (slower onset than ketamine)
- All sedated patients require full monitoring (Vitals plus ETCO₂, 12 Lead, glc)

What is Droperidol?

• A Butyrophenone antipsychotic that centrally acts as a dopamine and serotonin receptor antagonist. This combination is similar to the actions of metoclopramide and ondansetron. Also, a "cousin" of haloperidol.

Why not Haloperidol?

- **The simple answer is timing.** One of the most/the most valuable characteristic of a chemical restraint is quick onset.
- Droperidol time of onset = 5-10min
- Haloperidol time of onset = 15-20min

When to use Droperidol?

• It makes sense to use an anti-psychotic for psychosis related agitation as opposed to a dissociative agent. Every single agitated patient does not warrant ketamine dissociation.

The Agitation Spectrum

MILD Agitated but cooperative	MODERATE Disruptive without danger	SEVERE Agitated WITH danger
<ul style="list-style-type: none">• Conversational• Easily calmed with simple, non-pharmacological intervention (interaction, a sandwich)	<ul style="list-style-type: none">• Loud and destructive but distractible• Can have a conversation, even if brief• Does not pose an immediate threat to self or others• Requires pharmacological intervention	<ul style="list-style-type: none">• Unable to interact• Poses an IMMEDIATE threat to self or others• Requires rapid tranquilization

- The agitation spectrum allows us to target variable levels of danger to the patient and provider. For more information on this topic, please refer to Podcast Episode #21: "Ketamine For Agitation".
- The middle "orange" zone of the spectrum (Disruptive Without Danger): when behavioral health crisis is suspected (history, delusions, hallucinations) = use droperidol.

Indications and Dosage

- **Indication #1** = Undifferentiated Agitation (5-10mg IV or IM, may repeat x1)
- **Indication #2** = Second line Nausea/Vomiting (1.25-2.5mg IV or IM, may repeat x1). You can consider first line for N/V in cyclic vomiting, gastroparesis, and chronic abdominal pain.
- Always err on the low side of dosage for smaller (<70kg) and elderly patients.
- Droperidol is not to be used for psychosis without agitation.

Black Box Warning

- **In 2001, the FDA placed a black box warning on Droperidol due to concern for Torsades de Pointes (TdP).** There are several inconsistencies (high doses, duplicates, >70 on one day) with the MedWatch data that the Black Box is based on.
- **From 2015-2020, worldwide data from Calver, Cole, and others shows one episode of TdP out of ~29,000 ED cases.**
- **Remember that a black box does not make a drug illegal.** BUT...if you know a patient has a long QT (>500msec) – AVOID DROPERIDOL

EMS Evidence

- **Page et al. PEC 2018 - Showcases the effectiveness of droperidol use in an EMS setting.**
- **When compared to Midazolam, Droperidol acted quicker.** Droperidol also exhibited 1/3 of the adverse events (low respiratory rate/O₂ saturation, airway maneuvers, dystonia) as Midazolam did.
- **MCHD is following all Droperidol patients** – Our protocol may need to be adapted/amended based on transparent outcomes.

What if Droperidol Doesn't Work?

- **Give the drug time to work.** Make sure to turn off your "ketamine clock" while waiting for droperidol. Compare the wait time to Midazolam instead.
- **If you must add to Droperidol, use Midazolam unless in danger. Then the answer is always ketamine.**

References:

Agitation Spectrum provided by Andrew Merleman from paramedicpractitioner.net