

## AGITATION



Agitation is both a symptom and a sign of distress. Underlying causes can be physical, mental, or a combination of both.

Manifest behaviours include (but are not limited to): repetitive requests, attempts to leave, verbal outbursts, pacing, wringing of the hands and restlessness.

Common causes of disturbed behaviour in the Emergency Department are: alcohol and/or drug intoxication, alcohol/drug withdrawal, mental illness, hypoglycaemia, delirium, and head injury.

General approach to the patient with agitation include

- Ensuring staff and patient safety
- De-escalation if appropriate
- Address reversible causes

## MEDICATIONS

### PROMETHAZINE (PHENERGAN)

Available in oral and IM/IV formulation; promethazine is an antihistamine (H<sub>1</sub> blocker) with decades of safety data. Side effects are commonly related to feelings of drowsiness and over-sedation

### OLANZAPINE

A second-generation antipsychotic, olanzapine has been available for over 20 years. Primarily blocks dopamine (D<sub>2</sub>) and serotonin (5HT<sub>2A</sub>) receptors. There is recent evidence that olanzapine is effective for the management of agitation in the Emergency Department population<sup>1</sup>. Olanzapine is available as oral dispersible tablets which aids administration; the bioavailability for the oral route is equivalent to the IM injection.

Olanzapine has an onset of sedation around 15 minutes (compared to haloperidol that take 30-60 minutes)<sup>2</sup>.

#### References

1. Damsa C, Adam E, Lazignac C, et al. A naturalistic study of consecutive agitated emergency department patients treated with intramuscular olanzapine prior to consent. *Am J Psychiatry*. 2008;165(4):535-536. doi:10.1176/appi.ajp.2007.07060946
2. Zun LS. Evidence-Based Review of Pharmacotherapy for Acute Agitation. Part 1: Onset of Efficacy. *J Emerg Med*. 2018;54(3):364-374. doi:10.1016/j.jemermed.2017.10.011

## DOSES

### Mild Agitation

Oral promethazine 25mg repeated hourly

Maximum dose 100mg/24 hours

### Moderate to Severe Agitation

Olanzapine 10mg PO/IM

Repeat after 1 hour; max dose 20mg/24 hours

AND

Promethazine 25mg PO/IM repeated hourly max dose 100mg/24 hours

### Severe to Extreme Agitation

Consider ketamine IM (senior decision)

