

<b>Medication:</b> Metoclopramide	<b>PDN:</b> 6996.04	<b>Last Updated:</b> August 21 2025	<b>PMD:</b> Andrew Travers*	<b>PDC:</b> Chloe Koen Butt*	Page 1 of 2
-----------------------------------	------------------------	--	--------------------------------	------------------------------------	-------------

## METOCLOPRAMIDE

### 1.0 Classification

- Antiemetic

### 2.0 Mechanism of Action

- Metoclopramide has dopamine and 5HT<sub>3</sub> serotonin receptor antagonist properties acting centrally on the chemoreceptor trigger zone in the brainstem.
- Peripherally it works via other dopamine and serotonin receptors to promote gastric and small bowel motility.

### 3.0 Indications

- Nausea and vomiting due to any cause including but not limited to:
  - Gastroenteritis
  - Gastroesophageal reflux
  - Diabetic gastroparesis
  - Cannabinoid hyperemesis syndrome
  - Cyclic vomiting syndrome
  - Infection
  - Biliary tract disease
  - Pregnancy or hyperemesis gravidarum
  - Medication side effects (chemotherapy, opioids, SSRIs)
- Suspected migraine with or without nausea and vomiting.

### 4.0 Contraindications

- Known hypersensitivity
- When stimulus of gastrointestinal motility might be dangerous (e.g., bowel obstruction or perforation).
- Pheochromocytoma
- Seizure disorder
- Patients receiving medications that put them at risk for extrapyramidal reactions such as haloperidol or other antipsychotic medications.

### 5.0 Precautions

- Recommended dose should not be exceeded as increased dosage will not improve clinical outcome.
- Use with caution if patient taking CNS depressants.
- Use with caution in patients who have history of clinical depression.

### 6.0 Route

- May be given IV, IM or Subcut
- Subcut is preferred in the palliative setting.

### 7.0 Dosage

**Adult**

- 10 mg IV, IM or Subcut; if choosing to administer via IV: 10 mg mixed in 100 mL normal saline run over 10 minutes.

**Pediatric**

- Not recommended for use in patients under the age of 18 unless specifically identified to be used in a written palliative care plan or special patient protocol.

**8.0 Supplied**

- 10 mg in a 2 mL vial

**9.0 May Be Given By**

- PCP/ACP/CCP

**10.0 Adverse Effects**

- Drowsiness and fatigue
- Insomnia, headache and dizziness
- Extrapyramidal symptoms such as dystonia, muscle rigidity, akathisia, etc.
  - If signs of extrapyramidal reaction appear consider administering 25 mg IV, IM or Subcut diphenhydramine (subcut is preferred route in the palliative population).

**11.0 Special Notes**

- Adverse effects tend to abate when medication is discontinued.
- Dimenhydrinate is the antiemetic of choice for nausea and vomiting associated with vertigo or motion sickness, it is more effective than metoclopramide given its mechanism of action.
- Pregnancy category B [if there is a clinical need for it, Category B drugs are considered safe to use]

**12.0 References**

- Palliative Care Clinical Practice Guideline
- Abdominal Emergencies Clinical Practice Guideline
- Compendium of Pharmaceuticals and Specialties (CPS)

\*Electronically Signed

Copyright © Emergency Health Services