

Metoclopramide

Classification

Antiemetic, dopamine antagonist

Indications

■ CCP: Nausea and vomiting

Contraindications

- Hypersensitivity to metoclopramide
- Bowel perforation
- Seizure disorders
- Extrapyrimal reactions
- Monoamine oxidase inhibitor therapy within the past 14 days

Adult dosages

■ CCP: Nausea and vomiting

- 0.1 mg/kg IV/IO/IM to a single maximum dose of 10 mg
- May repeat every 6 hours as required. Total daily dose limit 0.5 mg/kg.

Pediatric Considerations And Dosing

Caution: Limited data available. Consultation with CiniCall is required.

Not authorized for infants < 1 year of age.

Mechanism Of Action

Blocks dopamine receptors in the chemoreceptor trigger zone of the central nervous system. Enhances up GI tract motility and accelerates gastric emptying.

Pharmacokinetics

Following intravenous administration:

- Onset: 1-3 minutes
- Duration: 1-2 hours
- Half-life: 5-6 hours
- Metabolism: hepatic
- Excretion: urine

Adverse Effects

>10%:

Gastrointestinal: Dysgeusia (nasal spray: 15%)

Nervous system: Drowsiness (~10% to 70%; dose related), dystonic reaction ($\leq 25\%$; dose and age related)

1% to 10%: Nervous system: Fatigue (~10%; dose related), lassitude (~10%; dose related), restlessness (~10%; dose related)

Frequency not always defined:

Cardiovascular: Atrioventricular block, bradycardia, cardiac failure, flushing (following high IV doses), hypertension, hypotension, supraventricular tachycardia

Dermatologic: Skin rash, urticaria

Endocrine & metabolic: Amenorrhea, endocrine disease (elevation of aldosterone), fluid retention, galactorrhea not associated with childbirth, gynecomastia, hyperprolactinemia, porphyria

Gastrointestinal: Change in bowel habits, diarrhea, nausea

Genitourinary: Urinary frequency, urinary incontinence

Hematologic & oncologic: Agranulocytosis, leukopenia, methemoglobinemia, neutropenia, sulfhemoglobinemia

Hypersensitivity: Angioedema, hypersensitivity reaction, tongue edema

Nervous system: Akathisia, confusion, depression, dizziness, drug-induced extrapyramidal reaction, hallucination, headache, insomnia, neuroleptic malignant syndrome, parkinsonism, seizure, suicidal ideation, tardive dyskinesia (total cumulative dose and duration of treatment related)

Neuromuscular & skeletal: Laryngospasm (rare)

Ophthalmic: Visual disturbance

Respiratory: Bronchospasm, laryngeal edema

Source: Metoclopramide. In: Lexicomp Online, UpToDate, Waltham, MA. (Accessed November 20, 2020.)

Warning And Precautions

May cause CNS depression.

May cause extrapyramidal symptoms, typically acute dystonic reactions. Higher doses increase these risks.

High doses and long term therapy (> 12 weeks) may cause tardive dyskinesia.

May prolong QT interval in some patients (particularly heart failure with renal impairment).

