

Metoclopramide – Beyond the brain

What are psychotropic medications?

Psychotropic medications are 'any drug capable of affecting the mind, emotions and behaviour'.

The three main classes of psychotropics prescribed are: antidepressants, anxiolytic/hypnotics (mostly benzodiazepines to manage anxiety and insomnia) and antipsychotics. Other psychotropic classes include anticonvulsants and stimulants.

Because they affect the brain and mind, anti-dementia medication and opioids can be classed as psychotropic medication. When more than one psychotropic is used, especially in the elderly, the side effects and risks can be compounded.

What is Metoclopramide?

DRUG CLASS: Prokinetic Agent and Antiemetic.

PRIMARY ACTION: Stimulates upper gastrointestinal (GI) motility and blocks dopamine receptors in the chemoreceptor trigger zone (CTZ), which helps prevent nausea and vomiting.

Metoclopramide's action, while involving dopamine, is predominantly focused on the GI tract and the CTZ for antiemetic effects. Its neurological side effects are considered adverse reactions rather than its intended therapeutic action on mood or cognition.

COMMON USES:

- Symptomatic treatment of diabetic gastroparesis (slow stomach emptying).
- Prevention of nausea and vomiting associated with cancer chemotherapy.
- Relief of symptoms in gastroesophageal reflux disease (GERD) unresponsive to conventional therapy.



Metoclopramide Risks & Risk Factors

Metoclopramide carries a significant risk of tardive dyskinesia - a serious, often irreversible movement disorder. Treatment beyond 12 weeks is strongly discouraged.

- Extended duration of therapy and high cumulative dose
- Older age, particularly women
- Patients with diabetes mellitus

The Shadow of Side Effects: Tardive Dyskinesia and Extrapyramidal Symptoms

- Tardive Dyskinesia (TD): A serious, potentially irreversible movement disorder characterized by involuntary movements, often of the face (lip smacking, chewing, tongue protrusion).
- Other Extrapyramidal Symptoms (EPS): These can include symptoms resembling Parkinson's disease, such as tremors, rigidity, and slow movements, as well as akathisia (restlessness).
- These neurological side effects can be mistaken for or overlap with effects seen with some psychotropic medications, leading to the misconception that metoclopramide itself is psychotropic.

PSYCHOTROPICS



Target mood, cognition, behavior. Psychiatric indications. Affect central dopamine.



METOCLOPRAMIDE



Target vomiting center (CTZ) & GI tract. GI indications. Affect dopamine via CTZ.



Key Distinction: Therapeutic Intent

The therapeutic intent of metoclopramide is to manage gastrointestinal issues and nausea/vomiting.

VS

The therapeutic intent of psychotropic medications is to manage mental health conditions.