

Metoclopramide

- Dopamine (D_2) receptor antagonist.
- Important actions — central
peripheral.
- MOA: act through both dopaminergic & serotonergic receptors

① D_2 antagonism: Dopamine; inhibitory transmitter in GIT $\rightarrow$ delays gastric emptying.
— cause gastric delay & LES relaxation attending nausea & vomiting.

Metoclopramide blocks D_2 receptors.

$\rightarrow$ hastening gastric emptying & enhancing LES tone.

central D_2 blocking actⁿ on CNS

$\rightarrow$ responsible for antiemetic property.

② $5HT_4$ agonism: Metoclopramide acts.

in GIT to enhance ACh release.

from myenteric motor neurons

by activation of $5HT_4$ receptor

on 2^o afferent neurons of ENS

$\Rightarrow$ activate excitatory interneurons

$\Rightarrow$ gastric emptying & LES tone effects are due to this actⁿ.

③ $5HT_3$ antagonism.

(at high dose)

Adverse Effects

- well tolerated.
- headache, dizziness & diarrhoea.
- QT prolongatⁿ can occur when palonosetron is administered with moxifloxacin/erythromycin.