

RED FLAGS

- Haematemesis:
 - Upper GI bleed
- Billous / Faecal vomiting:
 - Bowel obstruction
- Vomiting post Head Injury
 - Raised Intra-cranial pressure
- Unremitting vomiting:
 - Dehydration leading to hypotension
 - Electrolyte disturbance

ABCDE ASSESSMENT



ANY RED FLAGS

NO

MANAGEMENT

- Fluid resuscitation if Hypovolemic

INVESTIGATE / MONITOR

- Full set observations
- IV Access
- Bloods FBC / U&E / LFT / Bone

YES

CALL SENIOR

STEP 1

-DETERMINE CAUSE OF NAUSEA-

PERIPHERAL NERVE MEDIATED

Receptors:

- Serotonin (5HT₂ / 5HT₃ / 5HT₄)

- GI Tract:
 - Oesophagitis
 - Gastritis
 - Gastric stasis
 - Constipation
 - IBD
 - Bowel Obstruction

CENTRAL NERVE MEDIATED

Receptors:

- Histamine (H₁)
- Anti-muscarinic (ACh / M₁)

- Cognition:
 - Pain /Fear / anxiety
- Raised ICP
- Cerebellar disease
- Inner ear:
 - Labyrinthitis
- Brainstem:
 - Stroke

BIOCHEMICAL / EMETOGENIC AGENT MEDIATED

Receptors:

- Opioid (μ)
- Dopamine (D₂)
- Neurokinin (NK₁)

- Medications
- Hypercalcaemia
- Acidosis:
 - Respiratory
 - Metabolic
 - Uraemia
 - DKA
- Liver failure
- Electrolyte derangement
- Dehydration
- Hypo/Hyperglycaemia
- Disseminated cancer

These are not exhaustive lists

STEP 2

-1st LINE TREATMENT-

Treat any reversible causes

Antiemetic based on main cause pathway

GI:

- Laxatives
- NG tube

Pain:

- Analgesia

Raised ICP

Review Medications

Address underlying cause of:

- Acidosis
- Electrolyte derangement
- Hypercalcaemia
- Hypo/Hyperglycaemia

Dehydration:

- Oral / IV hydration

ONDANSETRON 5HT₃

CYCLIZINE H₁ / ACh

DOMPERIDONE D₂

Consider same Antiemetic but different route i.e. IM/IV if initially used PO

See BNF for dose / administration and contraindications

STEP 3

-2nd LINE TREATMENT-

Alternate 1st Line Antiemetic

Alternate Antiemetic

Consider same Antiemetic but different route i.e. IM/IV if initially used PO

See BNF for dose / administration and contraindications

LEVOMEPROMAZINE H / ACh / D / 5HT

HYOSCINE ACh

METOCLOPRAMIDE D₂ / 5HT₃

See BNF for dose / administration and contraindications

STEP 4

-COMBINATION TREATMENT-

Combination Antiemetics

DISCUSS WITH SENIOR

IMPORTANT POINTS

Always check side effect profile and interactions of each drug and ensure it is appropriate and safe for your patient

Do not use Prokinetic antiemetics for patient with suspected bowel obstruction:

- Domperidone / Metoclopramide

Do not use Metoclopramide in patient with Parkinson's disease:

- Use Domperidone as does not cross blood brain barrier

If combining Antiemetics:

- Do not prescribe competing drugs: Prokinetic and Antikinetic
- Do not use two antiemetics mainly working on the same receptor

Always consult BNF for dose / administration and contraindications for all above medications