

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

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ANY RED FLAGS

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MANAGEMENT

- Fluid resuscitation if Hypovolemic

INVESTIGATE / MONITOR

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

YES

CALL SENIOR

NO

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

GI:

- Laxatives
- NG tube

Pain:

- Analgesia

Raised ICP

Review Medications

Address underlying cause of:

- Acidosis
- Electrolyte derangement
- Hypercalcaemia
- Hypo/Hyperglycaemia

Dehydration:

- Oral / IV hydration

Antiemetic based on main cause pathway

ONDANSETRON

5HT₃

CYCLIZINE

H₁ / ACh

DOMPERIDONE

D₂

This is not an exhausted list

See BNF for dose / administration and contraindications

STEP 3

-2nd LINE TREATMENT-

Alternate 1st Line Antiemetic

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

Alternate Antiemetic

LEVOMEPRMAZINE

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 Antikinetik
- Do not use two antiemetics mainly working on the same receptor

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