

GI Bleeding (From Mouth or Rectum).

Upper

From Oesophagus to
Duodenum (+stomach)
caused by Peptic Ulcer,
oesophageal Varices +
cancer.

Lower

Occurs in Jejunum, ileum, colon rectum or Anus.
Caused by IBD, Haemorrhoids, Cancer.

Mucosal Protectants

Alginates / Antacids
we already know &

Form protective physical Barrier over surface of the Ulcer shielding it from
harsh environment of stomach lumen.

In Acid, Sucralfate polymerizes to form a sticky gel that strongly coats Ulcer.

Bismuth Chelate forms a protective layer by having high affinity for the exposed
mucosal glycoproteins and Necrotic tissue found in Ulcers.

Both drugs need to be given on empty stomach. (side effects: constipation, Nausea, Diarrhoea, Headache)
Protein + not function effectively.

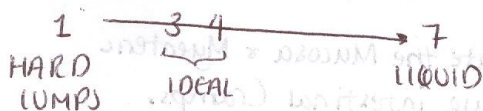
Misoprostol = A stable analogue of Prostaglandin E₁. Have protective GI Action.

↳ Acts on Parietal cells to reduce Gastric Acid production.

Increases protective mucus secretion.

Side Effect: Diarrhoea, Abdominal Cramps, Can induce Uterine Contractions
so shouldn't be used in Pregnancy.

Stool Chart



Type 1 and 2 = constipation

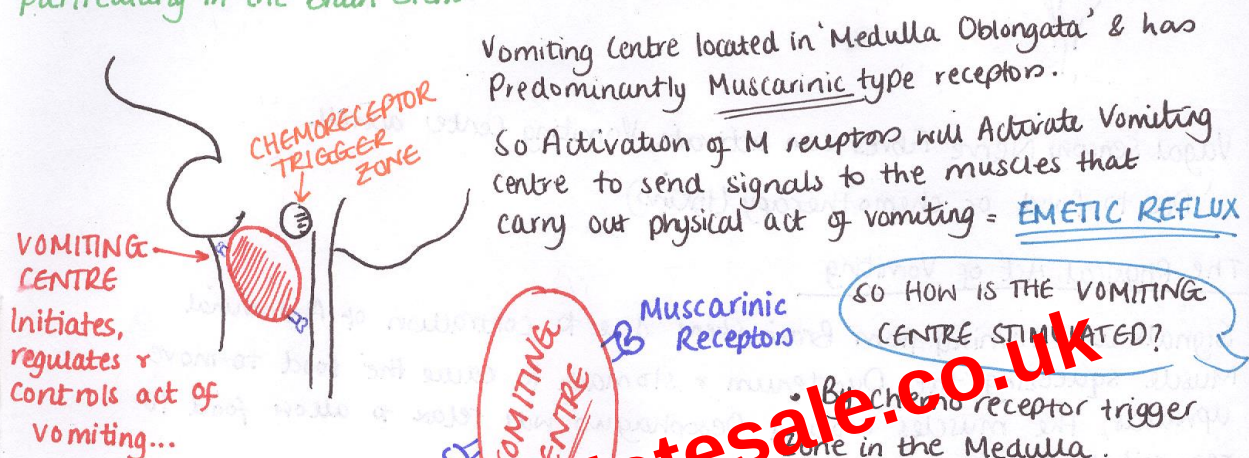
Type 5 - 7 = Diarrhoea + Urgency.

Physiology of Vomiting.

- Forceful Expulsion of Contents from Stomach & Intestine.
- Can act as defense mechanism to expel bad content/substances from Body e.g. Excess amount of Alcohol.

EMESIS = 'To Vomit'

All Centres initiated to the act of vomiting comes from the Central Nervous System, particularly in the Brain Stem.



Vomiting Centre located in 'Medulla Oblongata' & has Predominantly Muscarinic type receptors.

So Activation of M receptors will Activate Vomiting centre to send signals to the muscles that carry out physical act of vomiting = EMETIC REFLUX

SO HOW IS THE VOMITING CENTRE STIMULATED?

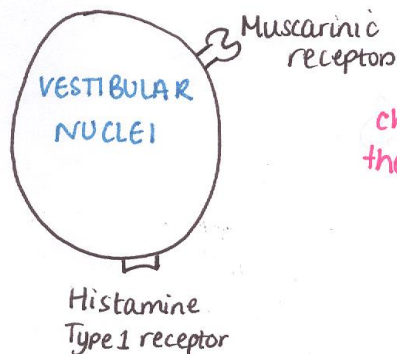
- By chemoreceptor trigger zone in the Medulla.
- Has 2 main types of receptor
 - Dopamine 2 receptor
 - 5-HT receptor.

Chemoreceptor Trigger Zone (CTZ) is outside BBB

So is more permeable to circulating substances e.g. toxins, so these circulating toxins can activate receptors of CTZ. Activation of CTZ stimulates vomiting Centre which activates Emetic Reflux

MOTION SICKNESS

Abnormally activates vestibulocochlear Nerve (inside inner ear) of labyrinth, which connects the labyrinth to the vestibular Nuclei in Brain stem



Activation of these receptors by vestibulocochlear Nerve causes vestibular Nuclei to stimulate chemoreceptor Trigger Zone, which will stimulate the vomiting centre => EMETIC REFLUX