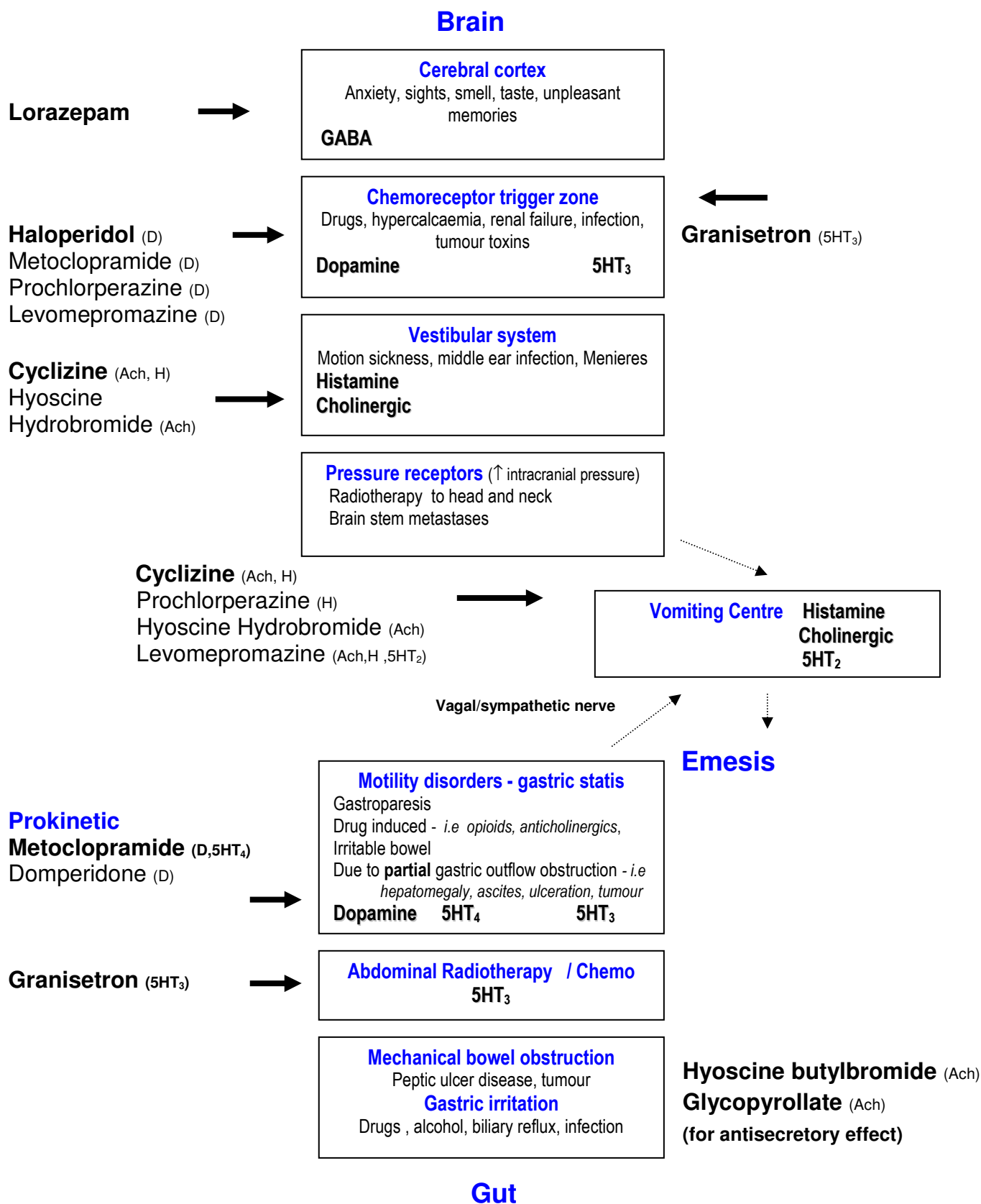


Nausea and vomiting¹²⁻¹⁴



Gastric stasis : Large volume vomit with epigastric fullness +/- hiccups
Total outflow obstruction : As for gastric stasis except + dehydration
Squashed stomach syndrome : As for gastric stasis except low volume vomit

Key to receptors
D Dopamine
Ach_m Cholinergic
H₂ Histamine
5HT₂ Serotonin

Summary of anti-emetics commonly used in Palliative care

	Receptor action	Main site of action	Choice of antiemetic for :
Haloperidol	Dopamine antagonist +++	Chemoreceptor trigger zone	○ Chemical cause e.g. drugs, ↑Ca, uraemia
Prochlorperazine	Dopamine antagonist ++ Histamine antagonist +	Chemoreceptor trigger zone	○ Chemical causes
Levomepromazine	Dopamine antagonist ++ Histamine antagonist +++ Muscarinic antagonist ++ 5HT ₂ antagonist +++	Chemoreceptor trigger zone Vestibular centre Vomiting Centre	○ Persisting nausea and vomiting (especially if mechanism uncertain)
Cyclizine	Histamine antagonist ++ Muscarinic antagonist ++	Vestibular Vomiting centre	○ Vagal stimulation eg mechanical bowel obstruction ○ Raised intracranial pressure ○ Motion sickness
Hyoscine hydrobromide	Muscarinic antagonist +++	Vomiting centre	As for cyclizine
Metoclopramide	Dopamine antagonist ++ 5HT ₄ agonist ++	Gut – increases peristalsis Chemoreceptor trigger zone	○ Prokinetic – gastric stasis, functional bowel obstruction ○ Chemical causes
Domperidone	Dopamine antagonist ++	Gut – increases peristalsis Chemoreceptor trigger zone	As for metoclopramide
Octreotide	Somatostatin analogue	Gut – reduces GI secretions and motility	○ Bowel obstruction with large volume vomitus
Hyoscine butylbromide	Muscarinic antagonist +++	Gut – reduces GI secretions & antispasmodic	○ Bowel Obstruction ○ Colic
Granisetron	5HT ₃ antagonist +++	Vagal 5HT ₃ stimulation Chemoreceptor trigger zone	○ Chemotherapy

Doses of anti-emetics commonly used in Palliative care

Generic name	Usual oral dose	Usual Subcutaneous dose		
		Stat	Range over 24hrs	Maximum over 24 hrs
Cyclizine (<i>Valoid</i>)	25-50mg 8hrly	50mg	100-150mg	150mg
Domperidone (<i>Motilium</i>)	10-20mg 8hrly po (30-60mg 8hrly rectally)	-	-	-
Haloperidol (<i>Serenace/Haldol</i>)	1.5 - 5mg nocte	1.5mg (500 micrograms in elderly or frail)	1.5 to 3mg	3mg
Hyoscine Hydrobromide (<i>sl = Kwells</i>)	150-300mcg s/l 8hrly	400mcg	400-2,400mcg	2400mcg
Levomepromazine (<i>Nozinan</i>) <i>Broad spectrum antiemetic</i>	6.25-12.5mg nocte	5-6.25mg	5-25mg	200mg for agitation
Metoclopramide (<i>Maxalon</i>)	10-20mg tds (pre meal)	10mg	40-60mg	100mg
Granisetron (<i>Kytril</i>) Chemotherapy induced nausea only	1mg bd po	3mg intravenous		9mg intravenous
Adjuvants				
Lorazepam (<i>Ativan</i>)	1mg stat s/l	-	-	-
Octreotide (<i>Sandostatin</i>)	-	-	150-600mcg	1000mcg
Dexamethasone (<i>Decadron</i>)	4-12mg po	-	4-12mg	-

Note

- Important to fully **assess patient** and **diagnose cause** of nausea or vomiting and **treat reversible causes**.
- Prescribe most appropriate first line antiemetic **regularly**.
- If symptoms **severe** may need to use a **syringe driver**.
- If combining antiemetics combine those with different actions (e.g Haloperidol and Cyclizine)
- **Do not usually combine** antikinetics (i.e antimuscarinic e.g Cyclizine) with prokinetics (e.g Metoclopramide)
- **Levomepromazine oral** : (formerly called Methotrimeprazine) - available as a named patient supply from Link in a 6mg tablet strength . Otherwise use ¼-½ of a commercially available 25mg tablet.
- **Also consider non-pharmacological methods of nausea control e.g Sea-Bands.Ginger is a natural antiemetic**