

# 1 GASTROINTESTINAL SYSTEM

## 1.01 ANTACIDS, GASTRIC ULCER REMEDIES

### 1.01a ANTACIDS – ULCER/NON-ULCER DYSPEPSIA, REFLUX OESOPHAGITIS

GENERIC (TRADE) NAME	CAT.	INDICATION/DOSE
<b>Aluminium Magnesium Carbonate Hydroxide Hydrate Tab 500mg (Ultacit/Talcid)</b>	<i>MSL</i>  <i>EDL</i>	Adult: 1-2 tab to be chewed up to 4 times daily, taken with a glass of water, when needed between meals and at bedtime.
<b>Magnesium Trisilicate 250mg /Aluminium Hydroxide 120mg Tab (Gelusil)</b>	<i>MSL</i>  <i>EDL</i>	Adult: 1-2 tab to be chewed up to 6 times daily between meals and at bedtime.
<b>Magnesium Carbonate 80mg /Calcium Carbonate 680mg Tab (Rennie's Antacid)</b>	<i>MSL</i>	Adult: 1-2 tab to be sucked or chewed up to 16 tablets max daily between meals and at bedtime. Child 6-12 yo, 1 tab taken as above, max 8 tablets daily. Not recommended for child < 6 yo.

#### COMMENT/CAUTIONS:

- **Antacids** are cheap & effective symptomatic therapy for dyspepsia/heartburn.
- **S/E:** Mg salts may cause diarrhoea and Al salts may cause constipation.
- **Antacids** may interfere with absorption of other drugs and should not be taken at the same time, esp. lithium, azithromycin, digoxin, rifampicin, tetracyclines, chloroquine, phenytoin, biphosphonates (alendronate etc); they may also damage enteric coatings of tablets.

**1.01b ULCER-HEALING DRUGS (H<sub>2</sub>-ANTAGONIST/PROTON PUMP INHIBITOR)**

GENERIC (TRADE) NAME	CAT.	INDICATION/DOSE
<b>*Cimetidine Tab 200mg &amp; Suspension 200mg/5ml (Tagamet)</b>	MSL  EDL	Adult: 400mg twice daily (with breakfast and at night) or 800mg at night for at least 4 wks (duodenal ulcer), 6 wks (gastric ulcer) and 8 wks in NSAID-associated ulceration; max 1600mg daily in divided doses. Infant < 1 yo, 20mg/kg/DAY in divided dose, child > 1 yo, 25-30mg/kg/DAY divide doses.
<b>*Cimetidine Inj 200mg/2ml (Tagamet)</b>	EDL	IM or slow IV Inj, 200mg q4-6h; max 2.4g daily. Child 20-30mg/kg/DAY divided doses.  For IV injection, dilute 200mg with 20ml NS and inject slowly over 15 min. For IV infusion, further dilute 200mg with 50-100mls of D5/NS and infuse over 15-20min.
<b>Omeprazole Cap 10mg &amp; 20mg (Losec)</b>	EDL	Benign gastric/duodenal ulcers and reflux oesophagitis not responding to conventional therapy including H <sub>2</sub> antagonists: 20mg once daily, x 4 wks in duodenal ulceration, or x 8 wks in gastric ulceration, or x 4 -12 wks in reflux oesophagitis. <i>Helicobacter pylori</i> eradication (with antibiotics): 20mg twice daily x 1 wk.
<b>Ranitidine Tab 150mg &amp; Syrup 75mg/5mls (Zantac/Raniplex)</b>	NF-Syr.	150mg twice daily or 300mg at night for 4-8 wks. Syrup (child use) 2-4mg/kg/DOSE given twice daily max 300mg/DAY.

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GENERIC (TRADE) NAME	CAT.	INDICATION/DOSE
<b>Ranitidine Injection 50mg/2ml (Zantac/Raniplex)</b>	NF	<p>Slow IV Inj 50mg or IV infusion 50mg over 2 hours, repeat q6-8h <i>prn</i>, max 400mg daily.</p> <p>For IV injection, further dilute 50mg with at least 20ml NS and inject slowly over 2 min, for IV infusion further dilute 50mg with 100mls of D5/NS and infuse over 2 hrs.</p>

**COMMENT/CAUTIONS:**

- **Cimetidine** is safe and should only be avoided if problems exist with confusion in the elderly or drug interactions (enhanced effect: anticoagulants, antiarrhythmics, some antidepressants, carbamazepine, ciclosporin, phenytoin, and theophylline).
- **HELICOBACTER PYLORI** - Suggested one week regimen (BNF): Omeprazole 20mg twice daily + Amoxicillin 500mg 3 times daily + Metronidazole 400mg 3 times daily.

**1.01c MOTILITY STIMULANTS –NON-ULCER DYSPEPSIA, GASTRIC STASIS**

GENERIC (TRADE) NAME	CAT.	INDICATION/DOSE
<b>Metoclopramide HCl Tab 10mg, Suspension 5mg/5ml, Injection 10mg/2ml, Suppository 5mg &amp; 10mg (Maxolon)</b>	EDL	<p>Gastroesophageal reflux, by oral/IM/IV /rectal routes: adult, 10mg 3 times daily, 5mg in 15-19 yo and &lt; 60kg; Child &lt; 1 yo (&lt;10kg) 1mg twice daily; 1-3 yo (10-14kg) 1mg 2-3 times daily; 3-5 yo (15-19kg) 2mg 2-3 times daily; 5-9 yo (20-29kg) 2.5mg 3 times daily; 9-14 yo (30kg and over) 5mg 3 times daily; max 0.5mg/kg/DAY.</p> <p>Antiemetic, oral/IV, child &amp; adult: 1-2mg/kg/DOSE q2-4h.</p> <p>Inject IM undiluted into a large muscle mass, inject IV undiluted slowly over 2 min. For IV infusion, further dilute 10mg with 50mls of D5/NS/LR and infuse over 15-30 min (max 5mg/min, conc 0.2-5mg/ml).</p>

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## 1.03 ANTISPASMODICS

GENERIC (TRADE) NAME	CAT.	INDICATION/DOSE
*Atropine Sulphate Inj 600ug/ml & 1mg/ml	EDL	SC, IM/IV bolus (undiluted) injected slowly, 0.3-1.2 mg q4-6h as needed.
*Hyoscine N-Butylbromide Inj 20mg/ml, Tab 10mg (Buscopan)	MSL	IM/IV (acute spasm) 20mg, repeated after 30 min if necessary. Oral, adult: 20mg 4 times daily, child 6-12 yo: 10mg 3 times daily.  Inject IM 20mg undiluted into a large muscle mass or dilute 20mg with D5/NS and inject IV slowly.

**COMMENT/CAUTIONS:**

- Consider dietary modification/counselling as primary treatment of IBS.
- **Hyoscine & atropine S/E:** dry mouth, urinary retention, blurred vision. Use cautiously in Down's syndrome, children and elderly, reflux oesophagitis, diarrhoea, ulcerative colitis, acute MI, hypertension, tachycardia, pyrexia, pregnancy and breast-feeding. They are contraindicated in closed angle glaucoma, myasthenia gravis, paralytic ileus, pyloric stenosis and prostatic enlargement.

## 1.04 ANTIHAEMORRHOIDS

GENERIC (TRADE) NAME	CAT.	INDICATION/DOSE
Bismuth Subgallate Co Suppository (Anusol)	MSL  EDL	One inserted into the rectum night and morning and after a bowel movement.
Lidocaine 60mg/Hydro- cortisone 5mg Suppository (Xyloproct) [Lidocaine = Lignocaine]	MSL  EDL	Insert 1 suppository at night and after bowel movement prn, for short-term use only.
Policresulen 50mg & Cincocain HCl 10mg/1g Ointment (FAKTU)	NF	Apply 2-3 times daily.

**COMMENT/CAUTIONS:**

- Suppositories containing steroid should be for short-term use only unless otherwise indicated.

**1.05 LAXATIVES, PURGATIVES (CATHARTICS)**

<b>GENERIC (TRADE) NAME</b>	<b>CAT.</b>	<b>INDICATION/DOSE</b>
<b>Bisacodyl Suppository 5mg &amp; 10mg [onset 20-60 min] Stimulant laxative</b>		For constipation; child < 10 yo insert one 5mg suppository in the morning; adult insert one 10mg suppository in the morning.
<b>Docosate Capsule 100mg [onset 1-2 days] Stimulant laxative</b>	NF	Chronic constipation, adult up to 500mg daily in divided doses.
<b>Lactulose Liquid 3.35g/5ml (Duphalac) [onset may take up to 48 hours]</b>		Constipation, adult 15ml twice daily for at least 2-3 days; child <1 yo 2.5ml twice daily, 1-5 yo 5ml twice daily, 5-10 yo 10ml twice daily. VVF patients 15-30mls twice daily.
<b>Laxative, Fibre, Natural Psyllium Husk (Metamucil Powder)</b>		VVF: > 12 yo, 1 rounded teaspoonful (12g) mixed in 250mls (1 glass) of water, 1-3 times daily; 6-12 yo, half adult dose above in 250mls of water, up to 3 times daily.
<b>Laxative, Sodium Phosphate Oral Saline (Fleet Phospho-Soda) [onset 30min-6 hours] [Contain 556mg Na per teaspoon powder.]</b>	NF	Laxative, orally adult & child > 12 yo 20-45ml, 10-12 yo 10-20ml, 5-10 yo 5-10ml. Purgative, 45ml the day before examination and another 45ml on the day of examination. Dilute recommended dosage in half a glass of water, then followed by 1 glass of water.
<b>Senna Tablets (total sennosides content 7.5mg) [onset 8-12 hours]  Stimulant laxative</b>	EDL	Constipation, adult 2-4 tablets usually at night, initial dose should be low then gradually increased; child > 6yo half adult dose in the morning on doctor's advice only

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**COMMENT/CAUTIONS:**

- Drug therapy should only be used where dietary changes were insufficient.
- **Lactulose** takes 1-3 days to take effect and is NOT suitable for PRN USE.
- **Stimulant laxatives** may cause abdominal cramps, avoid if there is intestinal obstruction. Prolonged use may precipitate atonic colon and hypokalaemia.
- **Bulk laxatives** MUST be taken with plenty of water to avoid obstruction. They are NOT suitable for acute relief. Contraindication: GI obstruction, colonic atony, and faecal impaction.
- DRUG-INDUCED CONSTIPATION: the following drugs commonly cause constipation: Ca antagonists, anticholinergics, iron, opioid analgesics, phenothiazine/tricyclic antidepressants.
- Laxatives should be routinely prescribed for all patients on regular opiate therapy e.g. morphine.

NOTE. For Throat and Mouth Preparations, see Chapter 10 Ear, Nose & Throat Section 10.04 Drugs for Oral Ulceration & Inflammation.