H₂-RECEPTOR ANTAGONISTS

Nurse prescribers can prescribe H₂-receptor antagonists for heartburn

GENERIC AND PROPRIETARY DRUG NAMES
- Cimetidine: available as cimetidine, Dyspamet, Tagamet.
- Famotidine: famotidine, Pepcid.
- Nizatidine: nizatidine, Axid.
- Ranitidine: ranitidine, Zantac.

ACTION
- Inhibits gastric secretions by inhibiting histamine at H₂-receptor sites in the gastric parietal cells.

INDICATIONS
- Nurse prescriber: heartburn.
- Other: benign gastric and duodenal ulcer, gastro-oesophageal reflux disease, Zollinger-Ellison syndrome.

CONTRAINdications
- Hypersensitivity.

CAUTIONS
- Children <12 years of age (cimetidine, ranitidine).
- Children <16 years (cimetidine).
- Older people (cimetidine).
- Hepatic impairment.
- Lactation.
- Organic brain syndrome (cimetidine).
- Pregnancy.
- Renal impairment.

COMMON SIDE-EFFECTS
- Diarrhoea and other gastrointestinal disturbances.
- Altered liver function tests (rarely liver impairment).
- Headache, dizziness.
- Rash.
- Fatigue.

INTERACTIONS
- Avoid cimetidine in patients stabilised on aminophylline, warfarin, phenytoin, theophylline.
- Avoid cimetidine in patients stabilised on aminophylline, warfarin, phenytoin, theophylline.

ADMINISTRATION
- Nurse prescribers: oral only.
- Intramuscular injection (cimetidine, ranitidine).
- Slow intravenous injection (cimetidine, ranitidine).
- Intravenous infusion (cimetidine, nizatidine, ranitidine).

NURSING CONSIDERATIONS Cimetidine
- Assess: gastric pH (should be five or more); fluid balance; mental status; gastrointestinal complaints.
- Administer with meals for prolonged effect; antacids one hour before or after.

Famotidine
- Assess: epigastric or abdominal pain; frank or occult blood in stools; blood counts (watch for decreased platelets); bleeding, haematuria, haematuria; thrombocytopenia, bruising, fatigue, bleeding, poor healing.
- Administer with food or liquid; antacids one hour before or two hours after dose.

Nizatidine
- Assess: Full blood count, gastric pH (should be five or more); fluid balance.
- Administer with meals for prolonged effect; antacids one hour before or after.

Ranitidine
- Assess: gastric pH (should be five or more); fluid balance; mental status; gastrointestinal complaints.
- Administer with meals for prolonged effect; antacids one hour before or after.

PATIENT TEACHING Cimetidine
- Avoid products containing magnesium, calcium, iron or aluminium within two hours.
- Avoid sunlight or use sunscreens.

- Increase fluid intake to 3L/day.
- Complete full course as prescribed.
- Report any adverse reactions.

Famotidine
- Complete full course as prescribed.
- Report bleeding, bruising, fatigue.
- Avoid irritating foods, alcohol, aspirin, smoking, extreme temperatures in foods.
- Avoid driving or other hazardous activities as drowsiness may occur.
- Increase bulk and fluid intake to prevent constipation.

Nizatidine
- Temporary gynaecomastia or impotence may occur.
- Avoid driving or other hazardous activities as dizziness may occur.
- Avoid irritating/spicy foods, alcohol, aspirin, caffeine, extreme temperatures in foods.

Ranitidine
- Complete full course as prescribed.
- Avoid OTC products unless directed.
- Rise to sitting or standing slowly to minimise orthostatic hypotension.
- Report any adverse reactions.
- May cause dizziness or fainting in first few days; may cause rash, impaired perspiration.