Peptic ulcers can be broadly classified into gastric ulcers and duodenal ulcers. Normally the stomach wall is protected by the mucosa against irritation of gastric acid. When the mucosa is damaged or when the stomach produces so much gastric acid that the protective lining is eroded with subsequent inflammation or necrosis, a local ulcer will develop.

The commonest symptom of peptic ulcers is intermittent abdominal pains, especially in the middle of the night or when you are hungry. Other symptoms include bloating, nausea, burping and loss of appetite. In severe cases, it may result in gastrorrhagia, an illness characterized by black stool or vomitus resembling ground coffee.

**Causes of Ulcers**

Causes of peptic ulcers are:

1. Congenital hyperacidity.
2. Mental strain and emotional stress that make the nervous system stimulate the excessive production of gastric acid.
3. Undesirable eating habits, irregular meals or overeating.
4. Smoking and excessive alcohol are direct causes of increased morbidity.
5. Drugs such as non-steroidal anti-inflammatory drugs (NSAIDs) and painkillers for rheumatism irritate and damage gastric mucosa.

**Classification of the Drugs**

Drugs for peptic ulcers are mainly classified into the following categories:

1. **Antacids:**
   They neutralise gastric acid, thereby relieving or eliminating the irritation and erosion to the stomach wall and the ulcer sites. Common examples include magnesium trisilicate and aluminium hydroxide. They are available in the form of chewable pills and liquids.

2. **Anticholinergics:**
   They suppress the secretion of gastric acid, reduce gastrointestinal movement and relieve stomach cramps. Common examples include propantheline bromide and scopolamine methylbromide.

3. **H2 receptor antagonists:**
   They directly suppress the secretion of gastric acid. Common examples include cimetidine, famotidine and ranitidine.

4. **Proton pump inhibitors:**
   They have similar but more powerful effect than H2 receptor antagonists. Common examples are omeprazole, esomeprazole and pantoprazole.

**Side Effects of the Drugs**

Antacids suppress the absorption of other anti-ulcer drugs, tetracyclines, iron pills, etc and affect their efficacy. These types of drugs should therefore be taken separately, with an interval of one to two hours. Antacids of different formulas may produce mild laxative effect or result in constipation.

Side effects of anticholinergics include glaucoma, urinary retention, rapid heartbeat and dry mouth.

H2 receptor antagonists have fewer side effects and the major ones are the loss of directional sense and allergic reactions. Such side effects will subside if medication stops.

Side effects of proton pump inhibitor include gastrointestinal disturbance and headache.

**Advice on Medication**

In general, antacids are effective for three to four hours in neutralising gastric acid. Optimal efficacy could be obtained if they are taken 30 minutes to one hour after meals.

Anticholinergics have the effect of suppressing the secretion of gastric acid and should be taken 30 minutes to one hour before meals. When taken at
night, by reducing the stomach movement, antacids could produce a longer protective effect.

H₂ receptor antagonists have a longer effective duration, and the ideal time for medication is at breakfast time and before bed. The medication period should be at least four weeks.

In case of adverse reactions, stop taking the medicines and consult your doctor right away.

If you have a stomach upset, you should see a doctor for thorough examination. Refrain from indiscriminate self-medication, as this may delay treatment and affect therapy if it turns out to be canceration instead of peptic ulcers.

Life Adaptations
Patients with peptic ulcers should take note of the following in their daily lives:

1. Quit smoking and alcohol. Avoid stimulating beverages such as coffee and strong tea.
2. Adopt proper eating habits. Take small but frequent meals and eat regularly. Avoid food that is stimulative and difficult to digest.
3. Take plenty of rest and stay happy. Learn how to manage stress and be relax.
4. Do not take medicines on an empty stomach, unless instructed by the doctor.

Storage of the Drugs
The drugs should be kept in a cool and dry place. Generally, they do not need to be refrigerated unless otherwise stated in the drug labels. Also, they should be stored properly to avoid accidents of mistaken consumption by children.

This information leaflet is for reference only. Medicines should be used as directed by the doctor.

For enquiry, please consult your doctor or dispensing staff.

Do not share your medicine with others.