This term means paralysis of the stomach. The muscles in the stomach wall normally contract rhythmically in order to mix up the food with the digestive juices, and then propel the contents into the small intestine. (duodenum). Control of this action is automatic rather than voluntary and is done by the autonomic nervous system (ANS).

In conditions such as diabetes, there may be nerve damage in the ANS as well as peripheral nerves (causing sensory loss commonly in the hands and feet).

This can lead to bladder and bowel problems and sexual dysfunction. If the stomach is affected, the co-ordination of the muscles in the stomach wall is lost and food is not passed on to the small intestine normally. As a result, the stomach becomes distended and food may be vomited. This can even cause food eaten a day or more previously to be vomited. Commonly, gastroparesis causes the following symptoms:

- \* nausea after a meal
- \* burning or pain below the solar plexus
- \* bloated feeling
- \* loss of appetite
- \* vomiting, often at night or in the morning before breakfast

Gastroparesis has been seen in patients with collagen (connective tissue) disorders and neurological disorders such as Multiple Sclerosis and Parkinson's.

There are a few arachnoiditis patients who have symptoms suggestive of gastroparesis. There may also be an overlap between gastroparesis and dyspepsia: GORD and non-ulcer dyspepsia have been identified in some patients with gastroparetic-type symptoms.

Gastroparesis has a similar association to respiratory problems as GORD: chronic cough, bronchospasm (causing shortness of breath and maybe wheezing) and laryngitis may occur.

Tests: gastric reflexes can best be assessed with the stomach empty. Barostat measurements of stomach muscle tone may be difficult to interpret: absent or reduced reflex responses may indicate either gastroparesis or dyspepsia, which is another cause of the stomach failing to relax as it would normally do, once a meal has been eaten.

A barium swallow and/or meal will help to ascertain the source of the problem, to differentiate between gastroparesis and dyspepsia and to exclude ulcers etc.

## TREATMENT:

If gastroparetic symptoms are occurring in conjunction with dyspepsia and/or GORD, then the treatment strategies for these conditions may well be effective in reducing the problem.

However, if the cause is related to autonomic dysfunction, (i.e. is neuropathic) it may be necessary to adopt different measures:

Previously, treatment of neuropathic gastroparesis involved prokinetic agents, which stimulated the stomach muscles. However, note that Cisapride (Propulsid) has been withdrawn from the market due to its effects on heart rhythm (it can cause serious abnormalities in rare cases).

Metoclopramide is a suitable alternative.

Physical therapy and biofeedback may be useful in retraining the motor functions of the digestive tract.