

Summary

Hiatus Hernia

Occurs at the junction of the esophagus and the upper stomach, "the hiatus". A loosening of this area results in the migration of the upper stomach through the diaphragm into the lower chest. This herniation creates a distortion of the lower esophageal valve, causing an increase of the pressure in the esophagus and the stomach content refluxes from below.

Three types of hernias were described by Allison:

Sliding hernia, para-oesophageal or rolling hernia and combined type (Sliding plus rolling) hernia.

Clinically, the sliding hiatus hernia is of no significance unless accompanied by abnormal gastro-oesophageal reflux. Reflux occurs only in 5 to 20% of cases. It is reflux rather than the hernia that determines the symptoms or complications.

The symptoms include vomiting, haematemesis, epigastric pain and sometimes chest infection.

Clinical presentations due to complications include dysphagia, anaemia and chest symptoms. Para-oesophageal hiatus hernia may be completely asymptomatic but it may reach a large size that the patient presents with mechanical symptoms. The clinical picture of the

mixed hiatus hernia is either that of reflux oesophagitis or that of para-oesophageal hernia depending on the degree of angulation of the cardia and the bulk of para-oesophageal component.

Sliding hiatus hernia and gastro-oesophageal reflux can be diagnosed by the clinical picture supported by many investigations such as radiography (chest X-ray, barium swallow and meal, endoscopy and biopsy of the oesophagus).

Para-oesophageal hiatus hernia is diagnosed by clinical picture, radiographic study as well as endoscopy.

For mixed and para-oesophageal hernia the operative treatment is strongly indicated while in sliding hernia and reflux oesophagitis treatment is either conservative or surgical.

If conservative treatment fails or if complications arise, surgical treatment is indicated.

The operative modalities aim at the creation of an intra-abdominal segment of the oesophagus, fixation of the stomach in its normal position beneath the diaphragm and reinforcing or replacing the lower oesophageal sphincter through, the creation of a passive, one way valve at the cardia.

These modalities include, Allison's procedure or, the Hill posterior gastropexy in addition to vagotomy class of operations which include, Nissen fundoplication and Belsey mark IV procedure.

After the success of laparoscopic cholecystectomy, numerous minimum-access operations have gained popularity. Among the more-advanced procedures, laparoscopic Nissen fundoplication has been accepted as an appropriate investigational operation. Early results have demonstrated reduced morbidity and a mortality rate comparable to that to open Nissen fundoplication.

Laparoscopic Nissen fundoplication is safe and effective if carried out by experienced esophageal surgeons who have mastered advanced laparoscopic techniques. The learning curve is long, but the results are satisfactory. Now the impression that this procedure may have advantages over the open procedure beyond reduced pain and shortened hospitalization. The occurrence of prolonged early satiety and the gas-bloat syndrome is reduced and the incidence of splenic injury has been zero when done by experienced surgeons. In the open operation the incidence is 2%. There were no splenic injuries even during the learning phase of the laparoscopic approach.