Summary and conclusion

Hiatal hernia in the adult population is an acquired disorder that result from gradual enlargement of the diaphragmatic hiatus. As the crural defect increases in size , the intra abdominal esophagus or the stomach migrate above the diaphragm.**(Kercher et al,.2001)**

Although hiatus hernia had been occasionally noted as a congenital anomaly or a consequence of abdominal trauma, the prevalence of this condition was not appreciated until the evolution of imaging technology. With the maturation of imaging technology, especially barium contrast radiography, it became reasonably easy to detect hiatus hernia.

Hiatal hernias are classified into four types

I- Sliding hernia.(typeI)
II- Paraeosphageal hernia.(typeII)
III- Mixed type.(typeIII)
IV- Giant paraesophageal hernia.(typeIV)

(Kahrilas&Pandolifino,2004)

Diagnosis of hiatus hernia depends on clinical picture and/or investigations.Symptoms may include reflux symptoms, dysphagia or chest pain.Investigations used in diagnosis of hiatus hernia include: Barium studies, upper GIT endoscopy, PH monitoring or esophageal manometry.

Management of hiatus hernia may be medical or surgical. For the typeI hiatal hernias , no surgical intervention is generally required , unless the

symptom of gastroesophageal reflux or its manifestations are sever enough to warrant an antireflux procedure. In this case, the hiatal defect is repaired at the time of fundoplication . type IIand III hiatal hernias, on the other hand , may result in gastric incarceration and strangulation. As aresult, the mere presence of paraesophageal herniation has traditionally been considered an indication for surgery **(Kercher et al,.2001).** Definitive surgical repair involves reduction of stomach, mobilization of the gastroesophageal junction, repair of the diaphragmatic defect. And fixation of the stomach within the abdomen with or without an antireflux procedure. Depending upon the procedure and surgical approaches (thoracotomy , laparotomy, laparoscopic or thoracoscopic), operative times for definitive repair may range from 1.5 to 5.5 hours **(Perdikis G et al.,1997)**

With the aging of the population, more patients live into their seventh and eighth decades of life and diseases associated with aging often develop. These include cardiac, pulmonary. and vascular diseases, which may coexist along with paraesophageal hernia. For these patients, the Operative risks of definitive surgical intervention must be weighed against the risks of progression to gastric incarceration or strangulation. Recognizing this dilemma, several alternative strategies have been proposed for treating these patients. The endoscopic reduction of acute gastric volvulus was described in 1995 in a small series of elderly patients with paraesophageal hernia and coexisting medical problems. Endoscopic reduction was utilized as a temporizing measure to allow optimization of medical status prior to definitive surgical repair **(Heniford BT et al.,1999).**

Open repair of paraesophageal hernia was associated with morbidity rates ranging from 13% to 17%, and mortality rates of 1% to2% **(Allen MS et al.,1993)** .even in the elective setting, definitive laparoscopic repair of paraesophageal herniation may carry morbidity rates as high as 28%.

In one series, major complications occurred in 16%of patients, including esophageal and gastric perforation, adult respiratory distress syndrome, myocardial infarction, stroke, and reoperation for abscess or recurrence**(Luketich JD et al.,2000)**

With the introduction of videoscopic techniqes controversy has arisen whether a thoracoscopic or laparoscopic approch is indicated for the surgical management of hiatus hernia.the results revealed that : The operative times are longer for the thoraoscopic technique as it is more technically demanding. It requires utilization of a double lumen endotracheal tube, lateral decubitus positioning, and a post-operative chest tube. The rigid rib cage limits exposure with minimally invasive trocars and instrumentation, further challenging the surgeons skills and recavery from thoracoscopy depends upon which operation was done using this technique. If a lung resection is performed, or if a chest tube is placed, then the patient must remain in the hospital for three to five days until drainage from the chest tube diminishes, and any air leak from the lung has healed. These factors account for longer operating times and length of stay and alone would mitigate against the thoracoscopic approach.

The reduced operating time, hospital stay and morbidity rates associated with laparoscopic approach supports its utilization for primarily motility disorder over thoracoscopic or open thoracic techniques.