LEFT SIDED MORGAGANI HERNIA WITH VOLVULUS OF STOMACH

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INTRODUCTION

Morgagni hernia is a congenital herniation of abdominal contents into the thoracic cavity through a retrosternal diaphragmatic defect. It was first described by Morgagni in 1790[1]. The reported incidence of congenital diaphragmatic hernias is estimated to be 1 in between 2000 to 5000 births. They are usually asymptomatic and often found incidentally on chest radiography. Although it is generally diagnosed incidentally by chest X-Rays, it rarely become complicated and may lead to severe disturbances. Symptoms of these hernias are attributable to the herniated viscera[2]. Intestinal obstruction is caused by a strangulated Morgagni hernia in an adult patient. Most Morgagni hernias are found and repaired in children, but 5% are found in adults. By presenting this case we aim to discuss an unusual left sided Morgagni hernia with gastric volvulus.

CASE REPORT

A 31 years old male patient presented with history of pain epigastrium for one month. Pain was sudden in onset, progressive in nature, aggravated with meal and relived by avoiding heavy meals. Mostly pain was dull in character and post prandial. In between he had two episodes of sever attacks of pain which were associated with vomiting, palpitation and dyspnoea. There was no previous history of dyspnoea. His baseline investigations were normal. X-Ray chest (Figure.1) revealed air filled space in left parcardiac region. Gastric air bubble was not visualized. Barium meal examination (Figure-2) revealed contrast filled stomach in left paracardiac region which showed volvulus. Endoscopy showed malrotation of stomach. His midline laprotomy was done which reveled Morgagni hernia left with organoaxial volvulus of stomach. Herniotomy done and anteromedial parasternal defect was primarily repaired with prolene. Anterior gastropexy was performed to avoid malrotation. Postoperative he made smooth uneventful recovery.

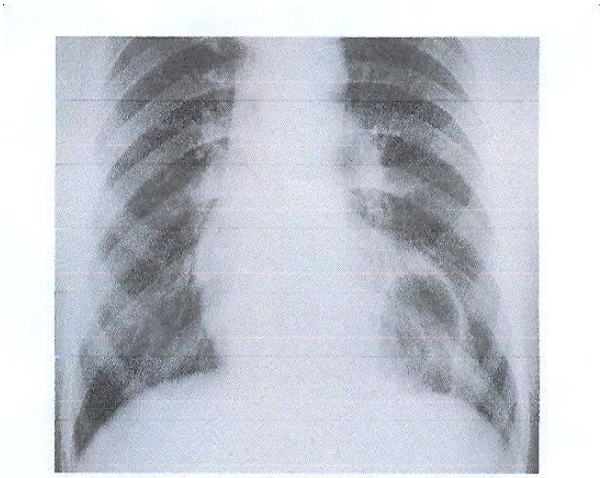

Figure-1 : Plain X-Ray chest PA view shows air filled cavity in left paracardiac region.Gastric air bubble is not visualized.

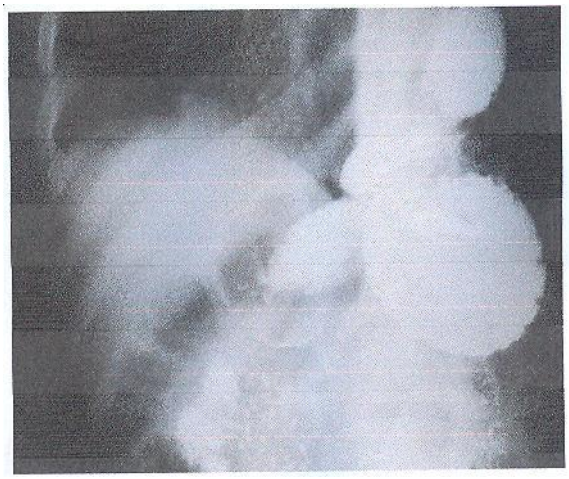

Figure-2: Barium meal examination shows contrast filled stomach having a volvulus.

DISCUSSION

Lack of fusion or muscularization of the pleuroperitoneal membrane anteriorly leads to defect in costosternal trigones known as Morgagni or Larrey hernia. Morgagni hernias are infrequently seen. Although their actual incidence is difficult to determine because generally to be asymptomatic, of all surgically treated diaphragmatic hernias, the frequency of Morgagni hernia was reported as 1% -3%[3].

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Anatomically about 90% of Morgagni hernias occur on right, 8% are bilateral and only 2% on left side as it was in our case. In our case patient was 30 years old and Morgagni hernia was on left side. The organs generally found in this hernia are transverse colon and omentum; stomach and portions of the liver were rarely reported in the literature[4-5]. Although usually asymptomatic, especially in older patients, the contents of the sac may be large enough to lead to gastrointestinal or cardiorespiratory symptoms in the form of post prandial dyspnoea, palpitation and cough[6]. Moreover Morgagni hernia may rarely become complicated and patients have symptoms due to intermittent gastric volvulus as was in our case. On x-ray a rounded opacity may be seen at the cardiophrenic angle with or without fluid level6. Computed tomography is diagnostic because it demonstrates the presence of fat, hollow viscus or both without need of contrast. All symptomatic adults should undergo for surgical repair which is performed via transabdominal repair. Adhesionolysis was done with reduction of contents and herniotomy with tension free repair. Diaphragm is pulled to the posterior part of sternum and posterior rectus sheath.

CONCLUSION

Although Morgagni hernia is rare but it should be considered if a patient clinically has postprandial dvspnoea and paracardiac herniation on x-ray. In our case intermittent gastric volvulus was occurring in the larrey space.

REFERENCES

1. Kelly KA, Bassett DL, An anatomic reappraisal of the hernia of Morgagni Surgery 1964; 55:495-499.
2. Barut I, Tarhan OR, Cerci C, Akdeniz Y, Bulbul M, J Thorac Imaging. 2005 Aug; 20(3): 220-2
3. Ketonen P, Mattila Sp, Mattila T, Jarvinen A, Surgical treatment of hernia through the foramen of Morgagni. Acta Chir Scand 1975; 141: 633-636.
4. Wolloch Y, Grunebaum M, Glanz I, Dintzman M, Symptomatic retrosternal (Morgagni) hernia. Am J Surg 1974; 127 : 601-605.
5. Minneci PC, Deans KH, Kim P< Mathisen DJ. Foramen of Morgagni hernia: changes in diagnosis and treatment. Ann Thorac Surg 2004; 77: 1956-1959.
6. Lanuuza A: the sign of cane: a new radiological sign for diagnosis of the Morgagni hernia. Radiology 1981, 101:293.