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A RARE CASE OF LEFT SIDED UNCOMPLICATED MORGAGNI HERNIA IN AN ADULT

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Abstract

Diaphragmatic hernias of Morgagni are anatomical defects in the anterior diaphragm that allow herniation of abdominal viscera into the thorax. They are the rarest of congenital diaphragmatic hernias and usually present in childhood with respiratory symptomatology. Adults are often asymptomatic or present with strangulation of visceral contents. We describe the case of a 60-year female presenting with chronic chest pain and diagnosed with a left sided Morgagni hernia, with stomach and greater omentum as its contents. She underwent thoracotomy repair of the hernia and the defect was repaired using polypropylene mesh.

Keyword: Morgagni Hernia, Adult, Thoracotomy, Mesh Repair

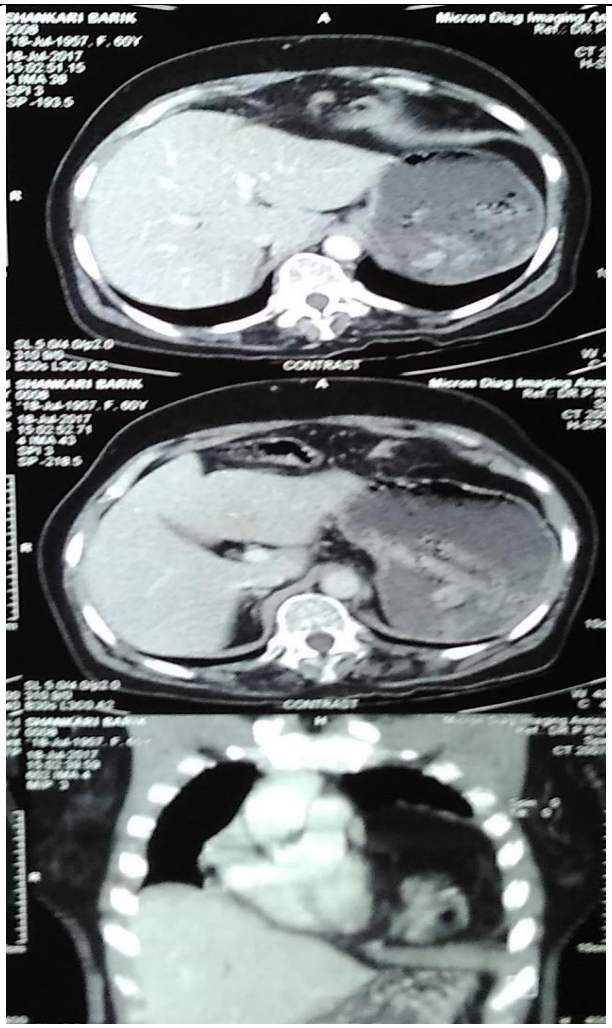
Introduction

Diaphragmatic hernias of Morgagni are anatomical defects in the anterior diaphragm that allow herniation of abdominal viscera into the thorax. They are the rarest of congenital diaphragmatic hernias, making up 2–3% of cases [1]. They usually present in childhood with respiratory symptomatology. Presentation in adults is even rarer, and most of them present with visceral strangulation.

Case Report:

A 60-year female presented with gradual onset chest pain for 8 months. There was no history of trauma or heavy weight lifting. A Chest X-ray was done which showed left lower zone opacification. A CECT Thorax was done following which a diagnosis of Diaphragmatic hernia was made with Gastric and Omental contents, seen on the left side of pericardium [Figure 1].

A left postero-lateral thoracotomy was done. Fundus and body of stomach along with greater omentum was found herniating into thoracic cavity, with no signs of congestion or gangrene. Adhesiolysis was done and after carefully reducing the contents a small 3x2cm defect was found anteriorly. Repair using polypropylene mesh was done and chest drains placed before closure [Figure 2]. There was no significant post-operative drain output. Post op course was uneventful



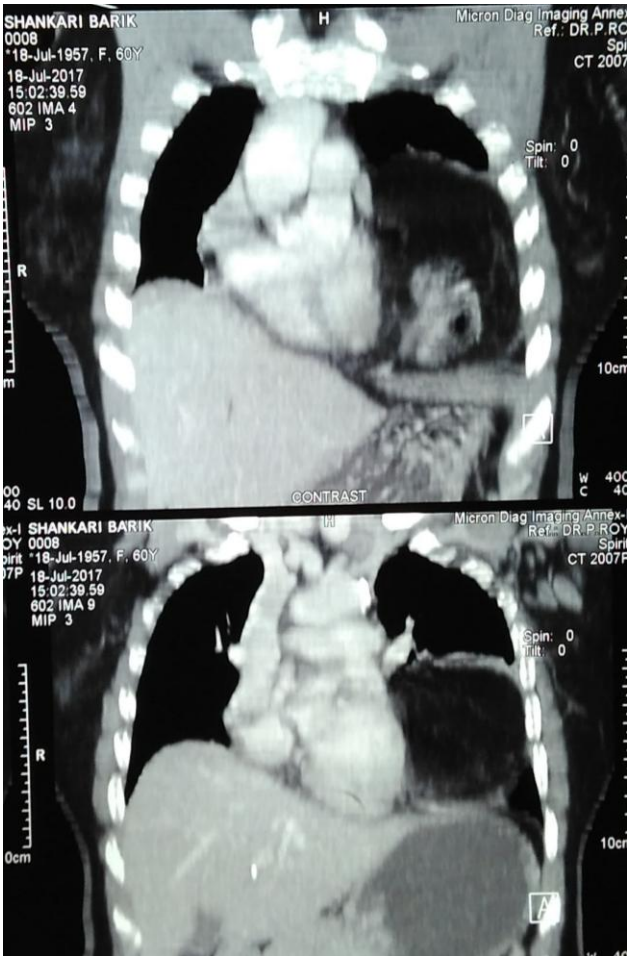


Figure 1: Pre-op CECT Thorax

Figure 2: Intra-op picture after repair

Discussion:

Morgagni Hernia is the rarest of the congenital diaphragmatic hernias. Not more than 300 cases in total have been reported worldwide [2]. They are believed to occur due to failure of the pleuroperitoneal folds to close. Some believe genetic or environmental triggers that disrupt the differentiation of mesenchymal cells during the formation of the diaphragm, lead to this condition. Morgagni hernias are more commonly seen on the right side despite the presence of liver underneath. It is believed to happen because of the presence of extensive pericardial attachments on the left side, which provides additional support [3]. Almost 90% of Morgagni's hernias are reported to be on the right side, with 2% located on the left and 8% bilateral [4]. They usually present in childhood with respiratory symptomatology. Diagnosis of Morgagni's hernias is usually late because patients can be asymptomatic or present with vague respiratory or gastrointestinal symptoms and signs [5]. As they have a high risk of complications viz. strangulation, some recommend repair even in asymptomatic patients [6]. However, some advocate conservative approach because Morgagni's hernia remains practically asymptomatic for a long time [7]. So, a symptomatic, yet uncomplicated, left sided Morgagni Hernia is a rare presentation. Emergency intervention is not always necessary unless there is evidence of strangulation. Transthoracic approach provides a wide exposure and easy repair of the hernia sac with almost no recurrence [8]. A subxiphoid preperitoneal approach has the benefit of a small incision. In cases of certain diagnosis, abdominal approach (open or laparoscopic) is preferred over thoracic approach for surgery because of easier reduction of the hernia and because abdominal viscera within the hernia can be easily pulled down to their normal location. In cases of unclear diagnosis, the recent trend is towards laparoscopy which has low morbidity

A symptomatic, yet uncomplicated (non-strangulated), left sided Morgagni Hernia presenting in an adult is an extremely rare scenario. Most hernias of Morgagni are diagnosed late because patients can be asymptomatic or present with vague GI and respiratory symptoms and signs. A missed diagnosis can lead to life-threatening complications such as obstruction or strangulation which warrants early surgical intervention.

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