



Obstructed Morgagni's Hernia in Adult A Surgical Emergency A Case Report

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ABSTRACT

Diaphragmatic hernias of Morgagni were first described in 1769 as anatomical defects in the anterior diaphragm that allow herniation of abdominal viscera into the thorax. Most hernias of Morgagni can be asymptomatic and hence diagnosed late in the life that too as incidental finding. They are the rarest of congenital diaphragmatic hernias, making up 2–3% of cases. They usually present in childhood with respiratory symptomatology. Incidental findings of this condition in adults are less common. Symptomatic adult cases of Morgagni hernias are even rarer. We present a case of obstructed Morgagni hernia in 70 year female diagnosed on computed tomography. It highlights the difficulties in diagnosis; missed diagnosis can lead to life-threatening complications such as strangulation which warrants early surgical intervention. Although laparoscopy is suitable for certain cases, signs of bowel obstruction constitute a surgical emergency and an indication for laparotomy.

KEYWORDS : Morgagni hernia; Adult; Intestinal obstruction; Computed tomography scan; Surgical emergency.

Introduction:

Morgagni's diaphragmatic hernia is herniation of abdominal content into thorax through the retrosternal anatomical defects in the anterior diaphragm. It is the rare type of congenital diaphragmatic hernias, making up 2–3% of cases.^[1] These patients are usually diagnosed in early infancy or childhood. It is extremely rare to present in an adult patient. Here we report an unusual case of obstructed Morgagni's hernia presenting in 70 year old female.

Case report:

A 70 year female presented with history of epigastric pain in abdomen since 7 days, abdominal distention, vomiting and not able to pass flatus or stools since 3 days. She described vomit was foul smelling. There was no past history of similar episode nor did she have recent trauma or surgery. On examination she was afebrile and hemodynamically stable; abdomen was distended with tenderness in the epigastrium. On PR examination rectum was empty. Respiratory system revealed mildly decreased air entry in the right hemithorax. X ray chest showing radiolucent area in right hemithorax. Xray abdomen showing multiple air fluid levels supporting the clinical diagnosis of intestinal obstruction. CT scan abdomen revealed evidence of herniation of transverse colon with omentum through a right anterior diaphragmatic defect, which was obstructed at the level of diaphragmatic defect (Fig 1, 2). Patient was taken for emergency exploratory laparotomy revealed right sided obstructed Morgagni's diaphragmatic hernia containing transverse colon and omentum (Fig3). The lumen of

colon was squeezed due to narrow opening of the defect leading to obstruction (Fig 4). The bowel was reduced by gentle traction. It was healthy pinkish with minimal edematous wall. Rest of the bowel was healthy. The diaphragmatic defect was around 2 cm and closed using 1-0 Ethilon with continuous sutures. Patient had an uneventful recovery.

Discussion:

Diaphragmatic hernias of Morgagni were first described in 1769 as anatomical defects in the anterior diaphragm that allow herniation of abdominal viscera into the thorax. Most hernias of Morgagni can be asymptomatic and hence diagnosed late in the life that too as incidental finding. They are the rarest of congenital diaphragmatic hernias, making up 2–3% of cases.^[1] They usually present in childhood with respiratory symptomatology.^[2] Incidental findings of this condition in adults are less common.^[2] Symptomatic adult cases of Morgagni hernias are even rarer.^[2] Very few present with chest symptoms, the majority describing abdominal pain due to strangulation of the viscera. Of the symptomatic adult cases, the herniated viscera involve omentum, small bowel or stomach.^[2] It can occur on either side of the sternum through a muscle-free triangular space of Larrey, although it is more common on the right.^[2] Most hernias of Morgagni are diagnosed late because patients can be asymptomatic or present with vague gastrointestinal and respiratory symptoms and signs.^[3] Ultrasonography has been shown to be useful in assessing diaphragmatic hernias but CT is the most sensitive as it gives excellent anatomical detail on the contents of the hernia

and its complications such as strangulation.^[4] Once diagnosed, the requirement for surgery is largely dependent upon the presentation.^[2] Repair avoids further complications but it is the timing which is important. Emergency intervention is not always necessary unless there is evidence of strangulation.^[2, 4] In these circumstances, it is often better to delineate the anatomy with radiology before proceeding to surgery. Recently, there has been a trend towards laparoscopy which is useful particularly when the diagnosis is unclear. It provides the benefit of an excellent view, minimal tissue trauma with subsequently faster recovery and superior cosmesis.^[5] Laparotomy, however, is still the most common approach for repair.^[2, 4]

Conclusion:

This case represents unusual adult obstructed Morgagni’s hernia. It highlights the difficulties in diagnosis; missed diagnosis can lead to life-threatening complications such as strangulation which warrants early surgical intervention. Although laparoscopy is suitable for certain cases, signs of bowel obstruction constitute a surgical emergency and an indication for laparotomy.

Images:

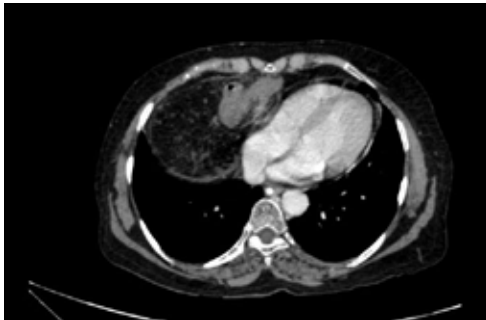


Fig1. CT image showing retrosternal hernia with omentum and bowel as content.

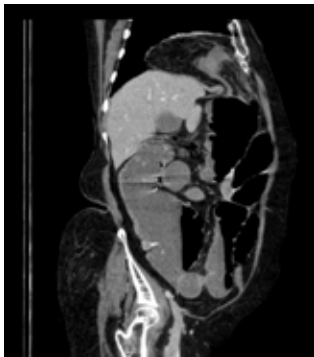


Fig2. CT image showing obstructed retrosternal Hernia with dilated bowel loops.



Fig 3 Obstructed colon with omentum



Fig 4 Anatomical defect in retrosternal region.

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