



ORIGINAL RESEARCH PAPER

General Surgery

CONGENITAL MORGAGNI HERNIA IN ELDERLY FEMALE- CASE REPORT

KEY WORDS: Congenital Diaphragmatic Hernia (cdh), Morgagni Hernia, Diaphragmatic Hernia, Bochdalek Hernia

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ABSTRACT

Patients with congenital diaphragmatic hernias (CDH) usually present in the neonatal period with respiratory distress. Delayed presentation of CDH in adults is rare and difficult to diagnose. We present a 61-year-old female patient who came with complaints of epigastric pain and retrosternal pain. X-ray and CT scan of the chest revealed a right-sided Morgagni hernia. The contents of the hernia were reduced and a primary tension free repair of the hernia defect was done through laparoscopy. The postoperative course was uneventful. A strong clinical suspicion and good interpretation of radiological images help diagnose CDH which present late. Laparoscopic repair is the treatment of choice at present. Primary repair is usually successful; however, mesh repair may be required for larger defects

INTRODUCTION

The foramen of Morgagni is a triangular space located between the muscle fibres from the xiphisternum and the fibres from the costal margin that insert onto the central tendon. Protrusion of any viscus through this anterior foramen is known as the Morgagni's hernia (MH). MH is considered to be a paediatric condition since it is congenital in nature. However, there have been many case reports and small series of MH involving adults. Morgagni hernia is more common on the right side, at the level of the seventh rib on either side of the xiphoid, in a space where the superior epigastric vessels pass; defects may also occur on the left, at the midline, or bilaterally; that on the left side is referred to as Larrey hernia .From one-third to more than half of patients are asymptomatic. These patients may be found incidentally when a chest X-ray undertaken for investigating unrelated problems .

METHODS

CASEREPORT :

61 year old female patient came with the complaints of upper abdominal pain for 2 years. She had vomiting for the past 15 days- on & off which is non bilious. She had heartburn & regurgitation. H/o ball rolling movements +. She had retrosternal chest pain & loss of weight with normal appetite. No h/o breathlessness, jaundice, hematemesis, melena, abdominal distension, fever, trauma. She is not a smoker/ alcoholic. No relavant family history. Her GC was fair. Vitals stable. On examination abdomen was normal in shape .all quadrents moves equally wit respiration. Soft , diffuse tenderness + .no guarding / rigidity.No mass palpable. Liver dullness not obliterated. BS + . Per rectal examination – normal fecal staining +.

Blood investigations were normal & viral markers were found to be negative. .

XRAY CHEST & ABDOMEN showed an elevation of the medial aspect of right diaphragm with gas bubble (fig 1). CT CHEST & ABDOMEN showed defect of size 2.3 cm in the right anterior aspect of the diaphragm with herniation of bowel loop probably transverse colon through the defect suggestive RIGHT MORGAGANI HERNIA . OGDscopy showed deformed stomach with normal mucosa.

Hence proceeded with Laparoscopic reduction and primary repair of morgagni hernia.

• GA, patient in lithotomy position, laparoscopic ports are

made in Supraumbilical 10mm camera port and 2 lateral 5mm working ports at the level of midclavicular line in the lumbar region. 5x3 cm defect noted in the right hemidiaphragm with omentum as conten{fig 2}t. Content reduced, sac seperated, a flap of peritoneum raised around the defect and is closed by primary repair using 2'0 PDS. After confirming hemostasis wound closed in layers.

RESULTS

Her post operative period was uneventful. Patient was discharged on 10th POD.

DISCUSSION

Congenital diaphragmatic hernias (CDH) are rare congenital defects. There are some different types; Bochdalek hernia, Morgagni hernia, and esophageal hiatus hernia. Bochdalek hernia is the most common type of congenital diaphragmatic hernia. Anteromedial or Morgagni hernia is the least common variety, accounting for only 1–3% of all diaphragmatic hernias . It is caused by a defect in the retrosternal region of the diaphragm and is considered to occur due to failure of fusion in the anterior part of the pleuroperitoneal membrane and deficiency in the process of muscularization .Morgagni hernia is congenital. However, there were some patients that had previous normal radiography suggesting that these hernias may be acquired through a congenital diaphragmatic defect .

If symptoms are present, the symptoms and signs are usually related to the size of the sac and contents in the hernial sac. The most symptoms present in these cases include nausea, vomit, recurrent chest infection, and chest pain .

congenital diaphragmatic hernias are commonly identified antenatally by ultrasound or in the neonatal period . They can rarely present late, constituting 10–13 % of all CDH cases . It is common in males with a male to female ratio of 1.8:1 . About 96 % of late-presenting CDH are Bochdalek hernia with a posterolateral defect .The other variants are Morgagni hernia (with a retrosternal defect) and the central hernia. Majority of late-presenting CDH are left-sided with an incidence ranging between 73 and 90 %.

Gastrointestinal symptoms are more common in left sided hernias whereas respiratory distress predominates in right sided lesions. Abdominal contents including the stomach, bowel loops, omentum, spleen, and liver may herniate into the

thorax. The diagnosis of delayed presenting CDH can be difficult. They can present at times with acute obstruction or strangulation. Sometimes patients present with chronic vague symptoms. Surgical repair of late presenting CDHs usually have a favourable outcome as they are not associated with pulmonary hypoplasia or other congenital anomalies.

Diagnosis is established with the help of a chest X-ray which may demonstrate gas or fluid-filled bowel loops in the thorax. At occasions, the chest X-ray may appear normal or doubtful warranting a CT scan of the chest. These hernias need to be treated even when asymptomatic as they can develop complications like incarceration, intestinal obstruction, and strangulation. Different surgical approaches to correct CDH are transabdominal, transthoracic, laparoscopic, and thoracoscopic. Repair through a thoracotomy is usually comfortable but laparotomy provides an avenue to examine the other hemi-diaphragm, if required. Primary repair by tension-free suturing is recommended with non-absorbable suture material for smaller defects. A mesh repair is required for larger defects. Covered mesh is the prosthesis of choice as adhesions to the mesh is less. At present laparoscopy is the method of choice both for primary & mesh repair.

CONCLUSION

Delayed presentation of CDH is relatively rare and can be difficult to diagnose. A strong clinical suspicion and correct interpretation of radiological imaging are vital. Our patient have presented with this congenital disorder at such an advanced age. This case illustrates the need to act quickly when a potential diagnosis of a Morgagni's hernia is made. A missed diagnosis can lead to complications such as haemorrhage, obstruction, or strangulation which need early surgical intervention. Primary non-tension repair is the treatment of choice and mesh repairs are reserved for large defects. Appropriate treatment is usually associated with good outcome in adults. Prompt surgical repair is mandatory to prevent life threatening complications.

DECLARATIONS

FUNDING: no

CONFLICT OF INTEREST:

The authors declare no conflict of interest

ETHICAL APPROVAL: Patient consent has been obtained.

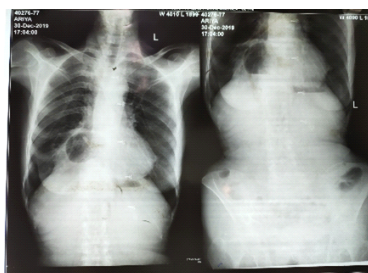


Figure 1: x ray chest & abdomen.



Figure 2 – picture showing the defect

REFERENCES

1. Sastha Ahanatha Pillai and Santhanakrishnan Chinnappan , Indian JSurg 2016 Jun;78(3):238–240:2015 Nov 13.
2. Tushar Patial, Sunil Negi, and Vikrant Thakur: Cureus. 2017 Aug; 9(8): e1549: 2017 Aug 8.
3. S.S. Jaiswal, Col, A.K. Pujahari, Air Cmde, Retd, Rohit Mehra, Maj, and Gagandeep Singh Maj : Med J Armed Forces India 2015 Oct; 71(4): 396–399. 2015 Feb 16
4. Gholamali Godazandeh1 and Farzad Mokhtari <https://doi.org/10.1155/2016/4268539>