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Diaphragmatic Hernia Atypical Presentation: Original Article

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Abstract: ***Diaphragmatic hernia in adults not always have typical presentation. Here we had an anterior diaphragmatic hernia in elderly man with acute episode of intestinal obstruction.***

Keywords: Adult Diaphragmatic Hernia, Anterior Diaphragmatic Hernia, Intestinal Obstruction, Elderly Patients, Atypical Presentation

1. Introduction

Diaphragmatic hernia in acute presentation usually presents with abdomen distension, vomiting and obstipation. On examination, patient showed signs of dehydration, tachycardia, and abdomen distended and bowel sounds not heard. Clinical diagnosis of intestinal obstruction was made proceeded with USG abdomen, which showed dilated large bowel. X ray erect abdomen raises suspicion of a left diaphragmatic hernia, which is confirmed with CT abdomen showing anterior diaphragmatic hernia with transverse colon as content.

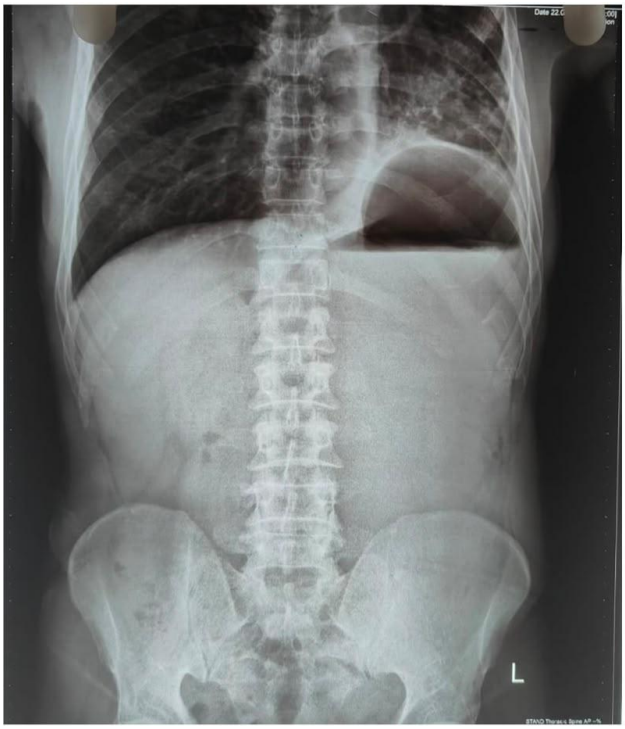
Patient was planned for emergency laparotomy and proceed. On exploring, right anterior diaphragmatic hernia with omentum and transverse colon as content was noted. Reduction of the content was done and defect was sutured primarily. Postoperative events were uneventful. Patient passed stools on Post-Operative Day 3 and eventually discharged.

2. Discussion

Diaphragmatic hernia occurs due to failure of the development of muscular diaphragm, which leads to herniation of abdominal viscera into thoracic cavity. Types of Diaphragmatic hernia are posterolateral hernia of Bochdalek, parasternal hernia of Morgagni-Larrey, eventration of diaphragm, and peritoneal-pericardial hernia. Morgagni hernia are quite rare. Presentation will not be always of chronic if the defect is less. Transverse colon is the common bowel to herniate via the defect.

Strangulation of bowel can occur due to missed or delayed diagnosis. CECT abdomen scan is preferred imaging of choice for the diagnosis and evaluation of the hernia contents, especially when the defect is small. Primary closure with interrupted, non-absorbable suture is the preferred method of repair, when the diaphragmatic edges can be opposed without undue tension. The use of mesh (meshplasty) is recommended if size of the defect exceeds ten cm and primary repair done for smaller defects.

Most common problem encountered during procedure will be closure of abdomen and gangrenous bowel in late presentation. Minimal invasive techniques are not very helpful in acute setting. Postoperative definitive chest physiotherapy and incentives spirometry should be strictly started to prevent pulmonary atelectasis and collapse.



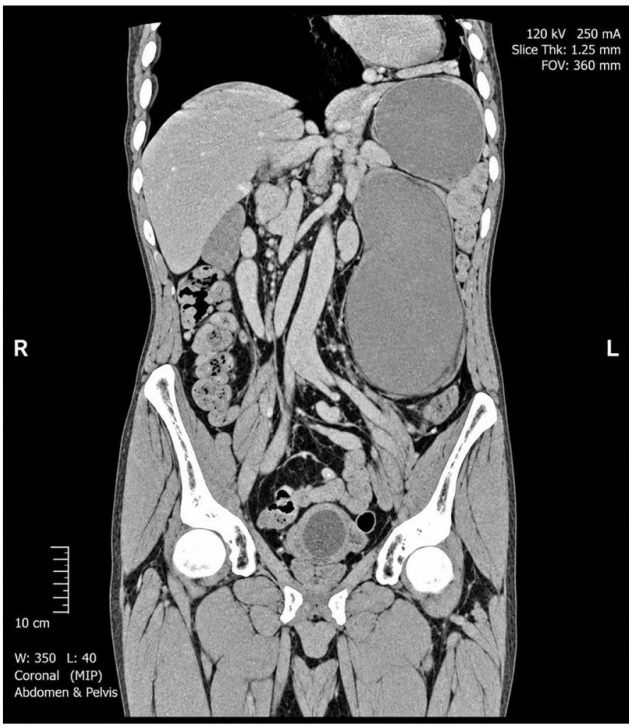
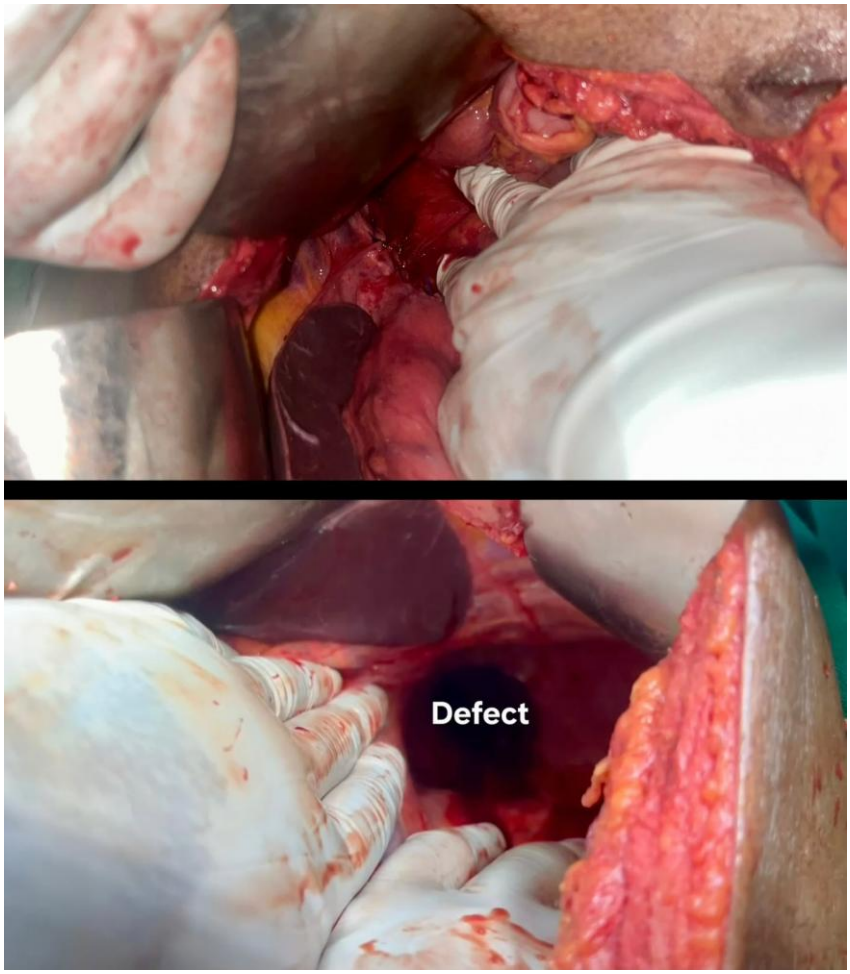


Figure 1: X-ray abdomen and chest: Shows a large air–fluid level in the left lower thoracic region, raising suspicion of a diaphragmatic hernia.

Figure 2: CECT abdomen and pelvis: Shows large rounded structures in the left abdomen; this view alone is insufficient to confirm diaphragmatic herniation.



Intraoperative image 1: Shows surgical exploration of the upper abdomen to assess the suspected diaphragmatic defect with Omentum and Transverse Colon as content.

Intraoperative image 2: Demonstrates a visible diaphragmatic defect, supporting the presence of a diaphragmatic hernia.

3. Conclusion

Diaphragmatic hernia is a surgical condition diagnosed incidentally with intestinal obstruction on acute or chronic presentation.

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