



Adult Onset Diaphragmatic Hernia: A Case Report

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ABSTRACT

The presence of part or all of the stomach within the thoracic cavity, usually by protrusion through the oesophageal hiatus in the diaphragm is known as diaphragmatic hernia. Majority of them are asymptomatic, may or may not be associated with gastro-oesophageal reflux disease. Here a case of left sided diaphragmatic hernia in an elderly obese

lady is reported.

KEYWORDS : Left sided diaphragmatic hernia; Adult.

Introduction: Diaphragmatic hernia is a defect or hole in the diaphragm that allows the abdominal contents to move into the chest cavity. Treatment is usually surgical.

The following types of diaphragmatic hernia exist:

Congenital diaphragmatic hernia

Morgagni's hernia

Bochdalek hernia

Hiatal hernia

Iatrogenic diaphragmatic hernia

Traumatic diaphragmatic hernia.

Diaphragmatic hernia in the absence of trauma is very rare in adults. The relevant literature describes less than a dozen cases of atraumatic diaphragmatic hernia.

Case report:

A 65yrs old obese housewife and mother of 4, presented to us with complaints of cough for 1 month, chest tightness off and on and anorexia. She was married, nonsmoker, and non alcoholic. She was no hypertensive, nondiabetic and there was no history of abdominal trauma. History dates back to 20 yrs when pt presented to physician for cough and anorexia. Patient had been on symptomatic treatment (PPI'S and antitussive drugs) on various occasions and was little relieved. Patient was diagnosed as somatic disorder 3 years back and being given anti depressants. Again patient was put on symptomatic treatment and was still on it during presentation (PPI'S and antitussives).

There was no lymphadenopathy, no clubbing, no cyanosis, no edema. There was no abdominal organomegaly, but patient was anaemic. Percussion note was dull in the left infrascapular region, shifting dullness not present. Breath sounds were reduced.



X - Ray chest showing cavity with air fluid level in left lower zone. Rest of the lung fields were normal.



Lateral view showing cavity with air fluid level in the lower lobe.level in the lower lobe.

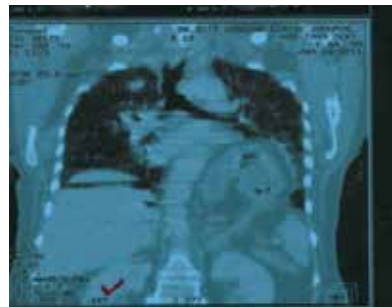
So our differential diagnosis were:

- Chronic Lung abscess
- infected bronchogenic cyst
- Infected Hydatid cyst
- Infected bullae
- Diaphragmatic hernia
- Cavitating malignancy .

Fibreoptic bronchoscopy was done and it didn't reveal any endobronchial growth or ulceration or granulation or narrowing.

On thorough elicitation of history patient had complaints of heart burn since 10yrs.Ultrasonography showed antral thickening in the pyloric part of stomach. No gross gall bladder or pancreatic pathology seen.

Upper GI endoscopy showed antral gastritis and there was difficulty in passing the scope through the antrum.



CECT showed highly placed left hemidiaphragm with mild sliding type of hiatus hernia and upside down configuration of stomach with posteroinferior position of gastric fundus and antero superior position

of body of stomach s/o partial gastric volvulus.

To confirm the diagnosis we performed barium meal.



Findings of Barium meal study are as follow:

Left hemidiaphragm is highly placed

GE junction is also highly placed

Stomach is rotated along the long axis i.e from cardia to pylorus which is a mirror image of normal anatomy with reversal of lesser and greater curves associated with hiatus hernia suggestive of gastric volvulus.

The patient was referred to the General Surgery department for surgical intervention to place the abdominal organs into the proper position and repair the opening in the diaphragm.

Discussion:

Adult onset diaphragmatic hernia is a rare condition with variable clinical manifestations. The majority of adult-onset diaphragmatic hernia is associated with trauma (1). Computed tomography (CT) scan is most effective in many Diaphragmatic hernia (DH) cases. It shows the herniated abdominal organs together with complications, such as intestinal strangulation, haemothorax, and rib fractures. Though we stressed that Multislice CT scan with coronal and sagittal reformatted images is the most effective and useful imaging technique on DH. The importance of the relatively simple and affordable Barium meal cannot be undermined. MR imaging with its high sensitivity for soft tissue may be performed in the selected patients, on the late presenting DH cases or on the cases of the diagnosis still in doubt especially (2). Various studies have noted left-sided diaphragmatic hernias containing colon, stomach, omentum, spleen, small bowel, pancreas and adrenal gland, whereas the documented contents of right-sided hernias have been limited to liver, gallbladder, kidney and omentum (3). Increases in intraabdominal pressure, such as occurs in pregnancy, may also lead to late manifestation in some cases (4). The finding of abdominal contents in the thoracic cavity is unexpected in cases such as ours, where the patient reports no trauma to the abdomen (5). Surgery is the mainstay of treatment in adult patients. The standard surgical approach is laparotomy or, less commonly, thoracotomy. The generally accepted protocol in the acute setting is that a diaphragmatic rupture is approached by using a celiotomy because the concomitant intra-abdominal injuries are more likely present than thoracic injuries (84% vs 53%) (6). The problem regarding which approach to use arises when the diaphragmatic injury is unnoticed for months or years. More surgeons approach long-standing hernias with a transthoracic or thoracoabdominal approach because the herniated intra-abdominal contents tend to be firmly attached to intrathoracic structures, making a transabdominal approach difficult (7).

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