

A Hernia of Morgagni Revealed by Acute Cholecystitis in Elderly: A Clinical Case

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Abstract

Case Report

Congenital diaphragmatic hernias are rarely encountered in adult patients [1]. The hernia of Morgagni is a rare type, which remains asymptomatic in the majority of patients. In this publication, we report the case of an elderly patient, whose hernia, until now unknown, was revealed following the investigations made for an acute cholecystitis.

Keywords: hernia of Morgagni, adult, cholecystitis.

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INTRODUCTION

The Morgagni hernia is a result of abdominal viscera migrating to the thorax through a retro-costo-xiphoid anterior orifice located behind the junction of the last costal cartilages and the xiphoidal appendix, on the right. It was first described by Morgagni in 1769 [2].

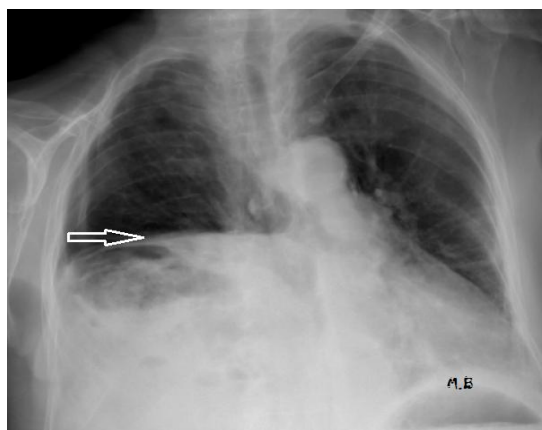
CASE REPORT

A 76-year-old patient, with a five day history of right hypochondrium pain and fever, was admitted to the emergency department. She had no former bowel surgery, no recent cough or concept of contact with

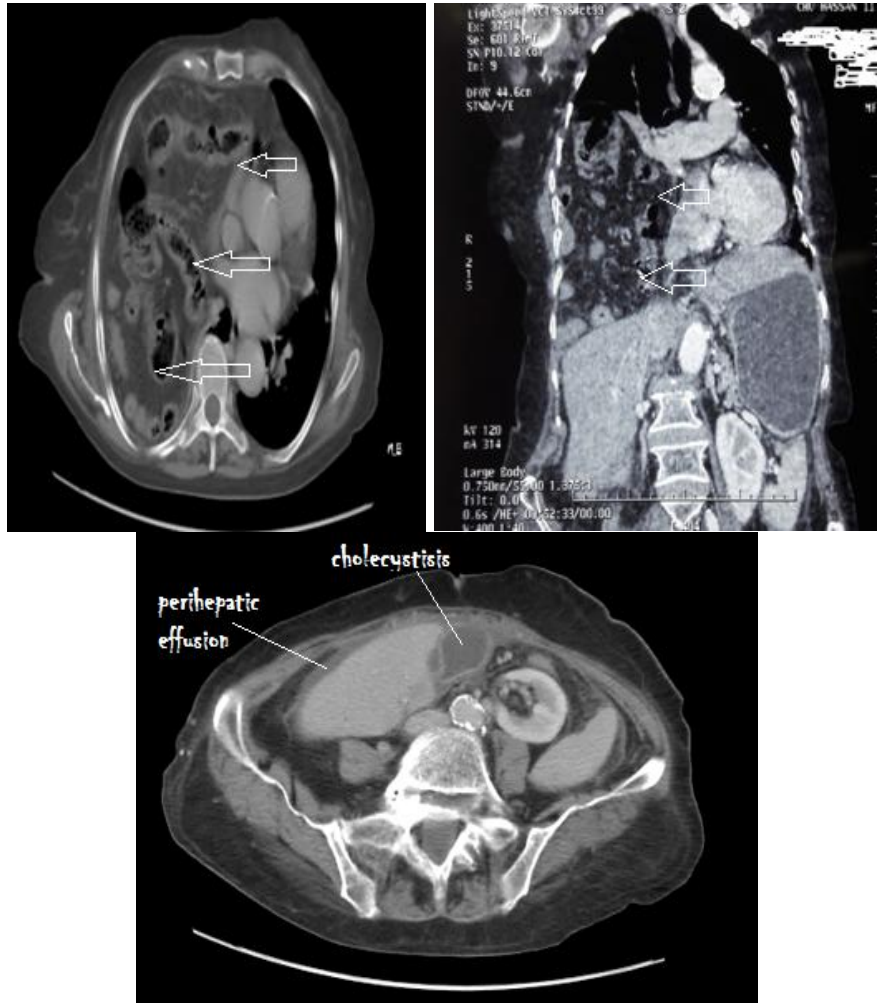
animals. However, she has been treated for constipation several times.

The patient was conscious, with a pulse at 85 b/m, a Blood pressure at 11/7, a Temperature at 38.3°, and normally colored conjunctivas. The clinical examination found a sensitivity of the right hypochondrium. Biologically, she had an hemoglobin at 14.1 g / dl, white blood cells at 18530 and a C-reactive protein at 157. The rest of the report was with no particularities.

We required a thoracic X-ray, which revealed an elevation of the right diaphragmatic dome with no systematized opacity (Icon below).

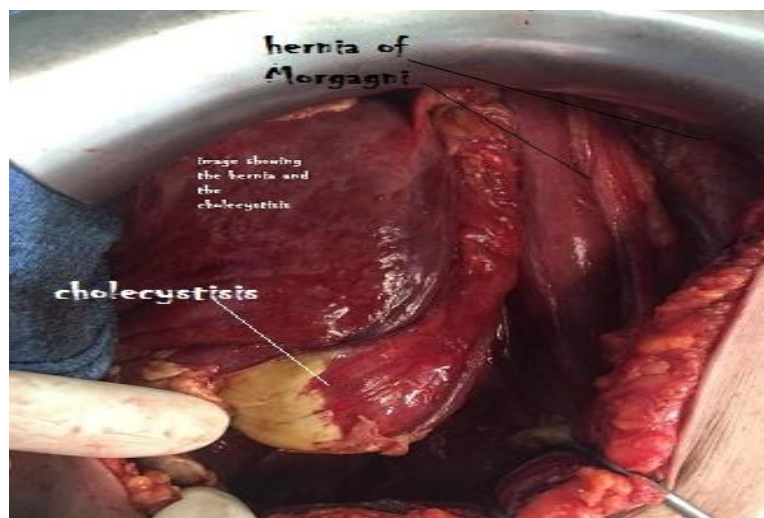


Then we urged a thoraco-abdominal CT scan; it has shown a diaphragmatic hernia of Morgagni without signs of suffering herniated elements, with cholecystitis complicated by a peri-hepatic collection.



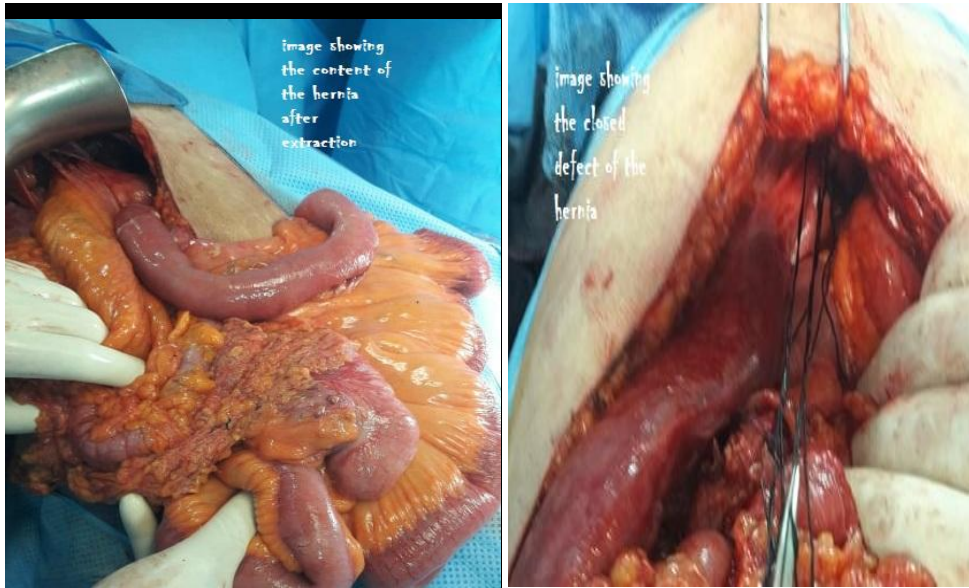
CT-scan images showing the hernia of the digestive elements (up), the cholecystitis and the effusion that indicate a probably performed gall bladder (down).

The decision was to operate the patient. We approached by a right costal incision; the exploration actually revealed a purulent perivesicular and perihepatic effusion of low abundance with a perforated pycholecyst and a Morgagni hernia.



We first reduced the hernia with release of several adhesions testifying to the age of the hernia; the contents were made of small bowel, mesentery,

transverse colon, right colon and large omentum, all well vascularized.



Photos showing the content of the hernia (left) and the closure of the defect (right)

Subsequently we closed the opening of the hernia by separate points using silk thread. The second stage of the procedure consisted of a retrograde cholecystectomy, given the highly inflammatory state of the gall bladder and its pedicle. At the end, we drained by 2 probes under the hepatic and interhepato-diaphragmatic, before closing the wall and put in place a chest tube. The postoperative course was simple with good clinical progress.

DISCUSSION

Morgagni hernias are known to be congenital defects found in the anterior area of the diaphragm between the costal and sternal parts; what makes them considered as a pediatric condition. They make up 3% of all diaphragmatic hernias [3]. However, many case reports and small series of Morgagni hernia have concerned adults [4].

Most of hernias of Morgagni are diagnosed late because patients are even asymptomatic or present non-specific respiratory and gastrointestinal symptoms (retrosternal discomfort, dyspnea, tightness in the chest, intestinal obstruction or constipation) [5, 6]. However, a missed diagnosis can lead to life threatening complications such as obstruction or strangulation [3].

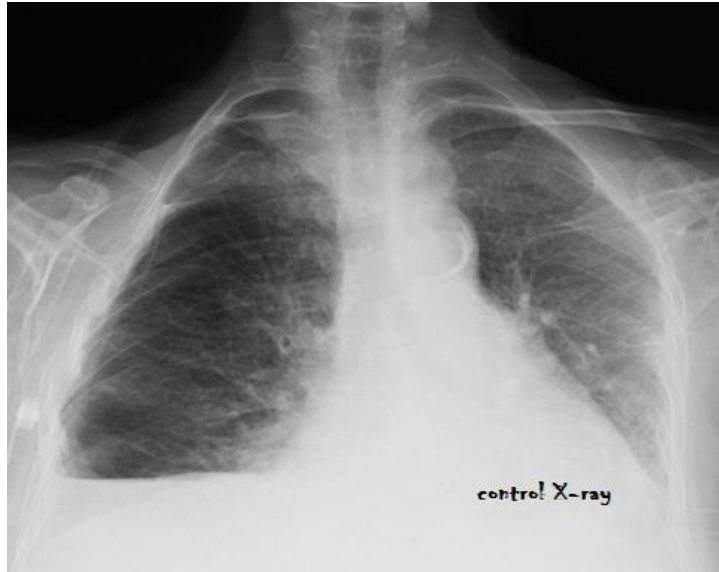
The most common and useful non invasive diagnosis methods are the chest x-ray and CT-scan [4]. Lateral chest radiographs are usually conclusive [7]; on a lateral chest X-ray, the hernia looks like a cane handle located below the sternum. It is known as the “sign of the cane” [8].

CT-scan can show bowel in the chest or even a solid mass (part of the liver) [4].

Surgery is the treatment of choice for patients with MH even when asymptomatic to prevent possible complications of incarceration, intestinal obstruction and strangulation [6]. However, there are no guidelines on the ideal surgical way since open abdominal, open thoracic or laparoscopic technique have all been practiced [9].

In our case, we did an open right costal laparotomy, since the hernia was on the right side so we could operate the cholecystitis at the same time. We did not resect the hernial sac to avoid any casualty to the pericardium or mediastinal structures.

The evolution was gratifying and the patient was discharged on the 3rd day.



X-ray image after surgery showing the re-expansion of the right lung.

CONCLUSION

In conclusion, the hernia of Morgagni is a rare condition in adult that can be discovered fortuitously. The surgical approach may be the only way of treatment, in order to avoid any future complication. However, there is no consensus on the procedure.

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