

# AN ELDERLY PATIENT WITH FINDINGS OF PNEUMONIA WAS FOUND TO HAVE INCIDENTAL MORGAGNI HERNIA

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## Abstract

**Introduction:** Congenital diaphragmatic hernias are infrequently encountered in adult patients. A rare type of this hernia is the Morgagni's hernia. If MH is normally congenital, it is considered a pediatric condition. However, it can be also occur in adults.

**Case Report:** Although they remain asymptomatic in a majority of patients, here we present the case of a 83-year-old female patient presented to our with a sudden onset of dyspnea, lack of oral intake, following abdominal pain and vomiting. It is also the only morgagni herniated patient that comes with pneumonia findings in the literature

**Conclusion:** Adults are asymptomatic and incidentally recognized. Some patients may also have non-specific symptoms such as abdominal pain, respiratory failure. Delayed diagnosis; it may cause complications such as haemorrhage, obstruction.

**Keywords:** morgagni, pneumonia, dyspnea

## Introduction

Congenital diaphragmatic hernia is usually an embryonic developmental anomaly. Morgagni hernia is less common than bochdalec hernia. Congenital diaphragm occurs between 1% and 5,1% of all cases. (1) Bochdalek hernia (BH) constitutes about 95% of herniated cases.(2) The foramina of Morgagni, also known as the sternocostal triangles, are small defects in the posterior aspect of the anterior thoracic wall between the sternal and costal attachments of the diaphragm. (3)(Figure 1)

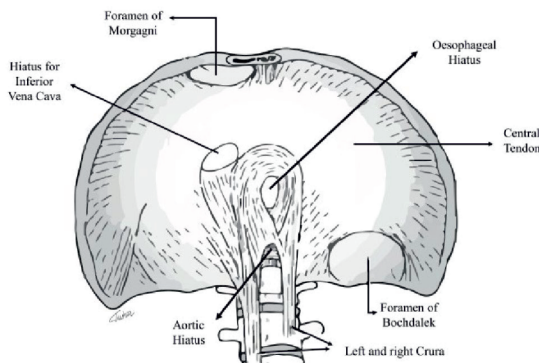
Anterior progression over any structure known as the foramen of Morgagni hernia(MH). If MH is normally congenital, it is considered a pediatric condition. However, it can be also occur in adults.(4) MH mostly observed % 90 on the right, 8% on the left, 2% on the bilateral. (5) Symptomatic patients may have mild to moderate substernal pain. There may be severe pain in patients with incarceration or strangulation. The most common omentum is found within the hernia satchet and the frequency, according to the colon, stomach and

small intestine follows this. Although incarceration is rare in Morgagni, all patients should undergo surgery without any complication.(6)

## Case Report

An 83-year-old woman applied to my hospital with complaints of sudden onset of dyspnea, low oral intake, abdominal pain, and vomiting starting 7 hours before. There was no previous surgery and trauma. She appeared pale and had labored breathing. Her body temperature was 36.8°C; respiratory rate 33 breaths/min; heart rate, 108/min; and blood pressure, 165/95 mmHg. On physical examination, respiratory sounds were decreased in the right lung and rales were heard in the left lung basalis. Abdomen was not distended but right upper abdominal tenderness. Laboratory results revealed leucocytosis (25,860/mm<sup>3</sup>), Hgb 8,98 mg/dl Urea 144 mg/dl Creatinin 4 mg/dl, Albumin 2,8 mg/dl, SGOT(Aspartate aminotransferase) 132 U/L SGPT(Alanine aminotransferase) 194 U/L Alkalene phosphatase 201 U/L Amilase 56 U/L and blood gas analysis revealed

hypoxia (PaO<sub>2</sub>, 58.5 mmHg) and acidosis. At the ultrasound, a minimal number of calcifications were observed within the sac, the gall bladder was hydroptic. On chest radiography, right intrathoracic intestinal bowel was detected. (FIGURE 2D), mediastinal shift to the left side. Chest Computed Tomography (CT) removed the intestinal loops in the right thoracic cavity, all the way from the anterolateral portion of the right diaphragm and mediastinally to the left. (FIGURE 2,A-C) The patient was considered to have acute respiratory failure due to Morgagni Hernis. Patients and their relatives were asked to sign a information form for surgery but they did not agree. Cholecystectomy was recommended in elective conditions in patients who were not considered acute cholecystitis by general surgery. The patient was started with ceftriaxone, a broad spectrum antibiotic. Despite 3 days of use, there was no significant decrease in the number of white cells. Ertapenem group antibiotics started.11 days later the patient's acute breathlessness improved, was discharged with suggestions. Written consent from the patient and approval from the hospital was obtained for presenting this case report.

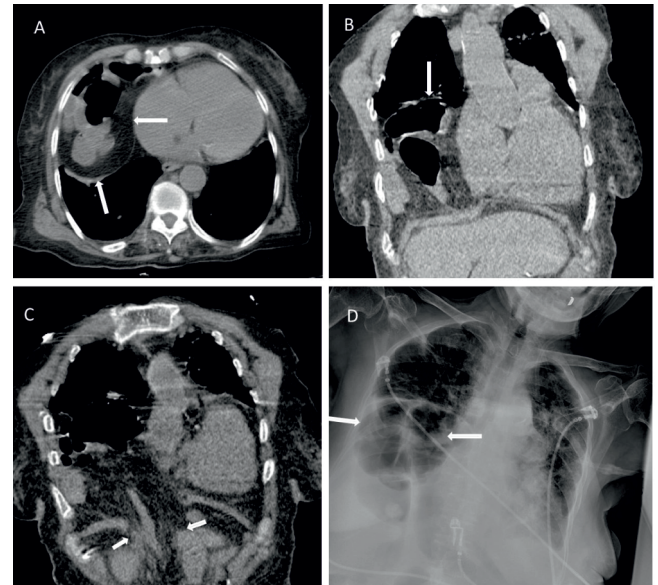


**FIGURE 1.** Anatomy of the diaphragm (Original illustration)

### Discussion

The congenital Morgagni diaphragm is thought to originate from the defect of the fusion of the transverse septum and then to the hernia by increasing intraperitoneal pressure.(7) The pathophysiology of acquired Morgagni hernia in adults remains unknown. Whether the disease is congenital or acquired is still considered. it is not known exactly whether this disease is congenital or acquired. Predisposing conditions that increase intraabdominal pressures such as chronic

cough, pregnancy, chronic constipation and trauma are thought to be effective on pre-existing diaphragmatic defects.(4)



**FIGURE 2.** The patient's axial (A), coronal (B,C), unenhanced computerized tomography and AP chest radiograph (D) showed omental adipose tissue and bowel loops in the right hemithorax. Coronal (C) unenhanced computed tomography shows omental adipose tissue and intestinal loops extending from the diaphragm defect to the right hemithorax.

Adults are asymptomatic and incidentally recognized. Some patients may also have non-specific symptoms such as abdominal pain, bloating, indigestion, constipation, loss of appetite and respiratory failure. Bowel obstruction and strangulation events have also been reported.(8) In our case, intestinal obstruction and strangulation did not occur and we were noticed incidentally.

The contents of the hernia are usually omentum,ovary, liver, colon and small intestine.It presents either alone or together.In our case,contents of the hernia colon and omentum.

X-ray radiographs are an effective diagnostic tool if omental fat mass is present in Morgagni hernia.Currently,the most sensitive of all these methods is BT.Reliable at the same level in MR imaging but with contrast and cost is the first choice. (9) In our case, the figure on the direct graph was in the form of a doubtful mass. But when it was correlated with BT, it became clear that it was morgagni hernia.

Morgagni hernias are no longer considered urgent, but each patient must be evaluated individually and surgical treatment is recommended to avoid emergencies. If the defect is large or the intestine bowel is visible in the bowel, the risk of hernia increases and surgery is indicated. General anesthesia and surgical risks should also be considered in elderly patients. Kuster, et al. In 1992, he reported the first laparoscopic repair where laparoscopy had become the first stage. (10). It has been proven safe with early recovery, low exposure to trauma and rapid return to normal function. we told our patient relatives that emergency surgery is needed and complications of the operation were explained. But the patient relatives don't want surgery.

### Conclusion

In conclusion, our patient is a rare occasion that is symptomatic from a disease and caused by acquired conditions rather than congenital causes. We present a rare case in the elderly woman who had suffered from dyspnea. It is also the only morgagni herniated patient that comes with pneumonia findings in the literature. Delayed diagnosis; it may cause complications such as haemorrhage, obstruction or strangulation necessitating early surgical intervention. However, as in our case, non-surgical patients can be managed.

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