Intestinal obstruction por hernia diaphragmática posterolateral derecha incarcerada

Keywords: Intestinal obstruction. Traumatic diaphragmatic hernia. Chest trauma.

Dear Editor,

A diaphragmatic hernia is a visceral protrusion through diaphragmatic defect. Visceral migration occurs from the abdomen to the chest due to the different pressures between the two compartments. Diaphragmatic hernias are classified, according to their origin, into congenital and acquired. Among the first ones we can mention: Bochdalek hernia, Morgagni hernia and peritoneopericardial hernia. Among the acquired ones we can distinguish between traumatic or surgical injuries of the phrenic nerve and diaphragmatic injuries (1). Between 60-70% of traumatic ruptures of the diaphragm affect the left dome and 30-40% affect the right dome. The protective effect of hepatic mass could explain a smaller amount of injuries on the right (2,3).

Traumatic diaphragmatic rupture is observed in the 0.2-4% of patients hospitalized for chest and / or abdominal contusion after a motor vehicle accident, fall from an elevated place, caught and crushed hazards, etc. (2-4).

Even 10-20% of breaks are not detected in the acute phase, being the break too small, getting progressively bigger, and which may go unnoticed and manifest late, even 50 years after the injury, by accident in an imaging technique for other reasons or because of the occurrence of epigastric pain, nonspecific chest pain, or, less frequently, by strangulation (2,4).

Fig. 1. a. TC tórax: hernia diafragmática derecha.

Fig. 1. b. Tránsito gastrointestinal: hernia diafragmática derecha.
There is a case of an elderly woman tapped right incarcerated diaphragmatic hernia.

71-year-old patient with history of hospitalization by persistent vomiting and malaise, labeled as chronic pangastritis, referring accidental fall from a tree three years ago. She came to the emergency department after a week evolution of vomiting uncontrollably.

In the exploration, we find respiratory failure secondary to pulmonary restriction, presenting a diffuse abdominal discomfort with deep palpation, no masses or visceromegalies.

Investigations: In the present analytical 15.400 leukocytes with neutrophilia (83%). The x-ray shows occupation of the right hemithorax. Given these findings a thoraco-abdominal CT scan (Fig. 1a) and GI (Fig. 1b) are performed, which suggest diaphragmatic hernia with difficult pass of the contrast with the other distal gastric herniation through the diaphragm, and abdomen reentrance also stenotic. Due to suspicion of complicated right diaphragmatic hernia she was urgently operated, performing a half upper midline laparotomy with the finding of a right posterolateral diaphragmatic defect of 4cm in diameter through which they move into the chest the distal stomach, omentum and right colon move into the chest.(Fig. 2). We proceed to the enlargement of the rupture and the reduction of the content seeing that these structures are incarcerated but there are no signs of vascular compromise. Diaphragmatic repair is performed by double non-absorbable monofilament suture.

The postoperative was satisfactory. Seven months after surgery the patient remains asymptomatic.

Discussion

Right traumatic rupture of the diaphragm is rare and the late manifestation of the same as incarcerated hernia is even rarer. Due to clinical-radiological suspicion, surgical indication is required as there is an evolutionary risk of promoted abdominal viscer volvulus (2.5).

The presence of abdominal injuries in a high percentage of input recommends an abdominal approach, by means of which problems are solved and the abdominal diaphragm is repaired. When there is a right diaphragm rupture, a thoracic approach is preferred, and if the treatment is delayed, many authors advise a thoracic approach to take off the adhesions to the thoracic visera. However, controversy exists when the patient has acute symptoms years after suffering the injury, where an abdominal approach facilitates the assessment of the feasibility and possible resection of the recently strangulated bodies (6).


Servicio de Cirugía General y del Aparato Digestivo.
Complejo Hospitalario Xeral Calde. Lugo, Spain

References