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CASE REPORT

ACUTE OBSTRUCTIVE ABDOMEN RESULTING FROM LEFT OBTURATOR FORAMEN HERNIA - CASE REPORT

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ABSTRACT

INTRODUCTION: Obturator foramen hernias are rare and have high morbidity and mortality due to delayed diagnosis. It is more frequent in women and its treatment is imminently surgical.

CASE REPORT: Female patient, 74 years old, referred for evaluation by the general surgery team with colic-like left iliac fossa pain radiating to the medial face of the ipsilateral thigh with 14 days of evolution. Associated with the condition, he reported hyporexia, nausea, vomiting and evacuation failure for 13 days. He denied previous pathologies. The patient had a computed tomography (CT) scan of the abdomen with a diagnosis of left inguinal hernia. Physical examination of the left inguinal region incompatible with diagnosis. A new CT scan was performed with evidence of obturator foramen hernia. Patient submitted to exploratory laparotomy, observing non-viable jejunum segment insinuated in obturator foramen. Enterectomy with enteroanastomosis was performed. The patient had a good clinical evolution. DISCUSSION: The obturator foramen hernia is a rare entity whose main predisposing factors are female sex, advanced age, low BMI associated with factors that lead to increased intra-abdominal pressure. It is difficult to diagnose clinically, and is commonly performed during an exploratory laparotomy procedure due to an obstructive acute abdomen. Attention should always be paid to this etiology in cases of obstructive acute abdomen without a defined cause. Its early identification and treatment promotes a considerable reduction in the morbidity and mortality of this pathology.

KEYWORDS: FORAMEN, OBTURATORY HERNIA; ACUTE OBSTRUCTIVE ABDOMEN

INTRODUCTION

Obturator foramen hernias are rare, accounting for less than 1% of all hernias and 0.2 to 1.6% of the etiologies of mechanical obstruction of the small intestine. It has a high mortality rate, ranging from 38 to 81%. This fact is due to the delay in diagnosis, which occurs when the herniated segments are already unfeasible, leading the patient to cases of sepsis with an abdominal focus. Its first case was reported in the 18th century, in 1724 by Arnaud de Ronsil. Only in 1851 was the first case successfully operated by laparotomy performed by Henri Obre described.[1]

They occur more frequently on the right, considering that the presence of the sigmoid colon in the left iliac fossa covers the obturator foramen in this region.[2] It is more frequent in women (6:1) due to anatomical and physiological factors inherent to the female sex: wider pelvis , greater opening and inclination of the obturator canal associated with greater transverse diameter of the pelvis. Other associated factors are peritoneal laxity, chronic constipation, multiparity and age.[1]

In this hernia, there is an inferior projection of the hernial sac, below the pectineus muscle or posterior to the external obturator muscle. It is a hernia that is difficult to palpate. Its contents usually consist of omentum or lateral clamping of the intestine (Ritcher's hernia), but incarceration of other abdomino-pelvic structures such as appendix, fallopian tube, ovary may occur.[2]

The clinical picture is triggered by compression of the obturator nerve, generating pain and/or paresthesia on the inner side of the thigh, which may extend to the medial side of the ipsilateral knee (Howship-Romberg sign). Another clinical sign presented as a result of compression of the obturator nerve is that of Hannington-Kiff, which consists of the absence of the reflex of the adductor muscle of the thigh when performing percussion in the region of the ipsilateral adductors. Acute abdominal pain is usually associated with signs and symptoms of intestinal obstruction, or sciatica-like pain. The incidence of intestinal necrosis associated with obstruction is high.[3]

The main surgical access routes for correction of obturator foramen hernias are: transperitoneal abdominal, preperitoneal abdominal, inguinal and femoral.[1]

CASE REPORT

A 74-year-old female patient referred for evaluation by the general surgery team with colic-like left iliac fossa pain radiating to the medial face of the ipsilateral thigh within 14 days of evolution. Associated with the condition,

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he reported hyporexia, nausea, vomiting and evacuation failure for 13 days. He denies previous pathologies. He brought with him an abdominal computed tomography (CT) report performed outside our service with a report of an incarcerated left inguinal hernia with dilatation of the upstream small intestine.

On physical examination, she was in a regular general condition, normocardia, normotensive, dehydrated 2+/4+, lucid and oriented in time and space. Cardiovascular and respiratory systems with no alterations. Abdominal examination showed distended abdomen, with pain on deep palpation in the left iliac fossa with positive sudden decompression in this region. In the inguinal region, no signs of inguinal or femoral hernias were found. Rectal examination with the presence of small fecal remnants, without blood on a gloved finger.

After physical examination, an open nasogastric tube was requested, X-ray of the acute abdomen (standing and lying down) was requested, followed by laboratory tests. Acute abdominal X-ray showed diffuse distention of small bowel loops with no evidence of obstruction points to the method. A new CT scan of the abdomen was then requested, with evidence of left obturator foramen hernia.

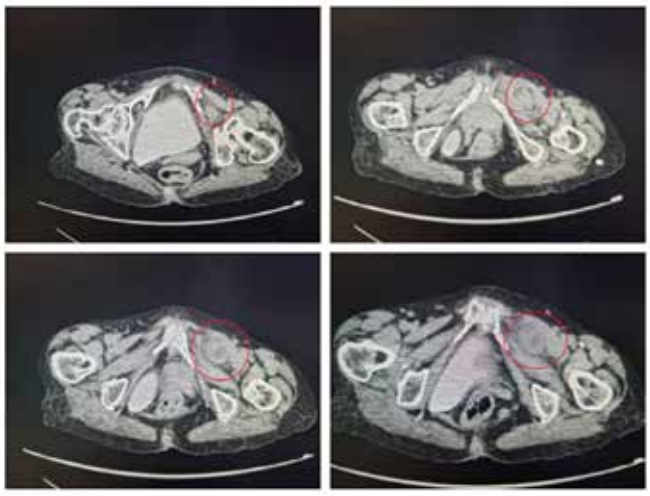

Figure 1 - Abdominal tomography without contrast showing left obturator foramen hernia.

It was then decided to submit the patient to an exploratory laparotomy. A supra and infraumbilical incision was made. The cavity inventory showed the presence of a jejunal loop at 120 cm from the angle of Treitz, herniated through the left obturator foramen, non-reducible and with signs of necrosis. There was no evidence of free fluid in the abdominal cavity. Due to the impossibility of reducing it, opening of the space of Retzius was performed with resection of the herniated loop (approximately 30 cm). Due to the absence of contamination of the abdominal cavity and the hemodynamic stability of the patient, an end-to-end enteroenteric anastomosis was performed with suture in two planes using non-absorbable 3-0 polypropylene thread. After anastomosis, the obturator foramen failure was corrected with the placement of a thick marlex mesh anteriorly to the obturator foramen in the space of Retzius and posteriorly to the obturator foramen, anteriorly to the peritoneum. Peritoneum was closed with absorbable polyglactin thread. The patient had a good clinical evolution and was discharged 7 days after admission.

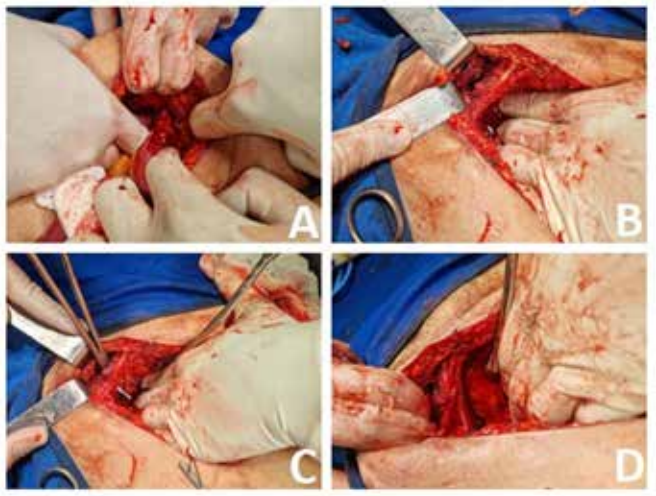

Figure 2: A - Jejunal loop herniated in the left obturator foramen with sign of distress. B - Retzius space dissection with subsequent non-viable jejunal follow-up enterectomy. C - Identification of failure in the obturator foramen. D - Final appearance after placing the marlex mesh anteriorly and posteriorly to the obturator foramen.

DISCUSSION

Obturator foramen hernia is a rare entity whose main predisposing factors are female sex, advanced age, low BMI associated with factors that lead to increased intra-abdominal pressure such as COPD, chronic constipation and multiparity.[4] The patient referred to in this case was a female, had advanced age, multiparity (11 pregnancies) and reports of chronic constipation as risk factors.

It is a pathological entity of difficult clinical diagnosis, being commonly performed only during abdominal inspection during exploratory laparotomy procedure due to an obstructive acute abdomen.[3] In a smaller percentage of cases, its diagnosis can be made by complementary exams. , such as computed tomography of the abdomen, as occurred in the case reported.

The surgical approach indicated in the emergency is wide exploratory laparotomy, as it allows a better inspection of the abdominal cavity with better identification of the hernia, its reduction or resection in case of non-viability of segments, as in the case presented. The laparoscopic approach can be performed, being more indicated in a context outside the emergency, in patients who have not yet progressed to frank obstructive conditions and with possible suffering from intestinal loops.[5,6]

The repair indicated for the failure of the obturator foramen is performed with synthetic meshes. Their use is not recommended in the case of intestinal gangrene or perforation. In the case presented here, we chose to place a synthetic mesh despite the fact that the herniated segment showed signs of necrosis because there were no signs of contamination of the abdominal cavity or the space of Retzius. One option for such cases is to close the gap with a purse-string suture using non-absorbable threads or interrupted sutures.[1]

CONCLUSION

The obturator foramen hernia presents a clinical picture of difficult diagnosis and high morbidity and mortality for the patient if its identification and correct approach are not performed early. The importance of this case is due to the fact that it occurred in a less frequent anatomical region (obturator foramen on the left) associated with a clinical picture of obstructive acute abdomen with the first imaging test suggesting left inguinal hernia, not being corroborated by physical examination. There is still no consensus in the literature on the best way to approach the failure in the obturator foramen, with the option of closing with a synthetic fabric mesh. Attention should always be paid to this etiology in cases of obstructive acute abdomen without a defined cause. Its early identification and treatment promotes a considerable reduction in the morbidity and mortality of this pathological entity.

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