Obturator Hernia “Skinny Little Old Lady Hernia”

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ABSTRACT

Obturator hernia has the highest mortality as it is challenging in diagnosis due to its rarity and non-specific signs and symptoms. We report a case of an elderly skinny multiparous woman who has no previous history of surgery presented with intestinal obstruction symptoms and background history of intermittent constipation. On examination her abdomen was distended with no other significant findings. Abdominal x-ray showed small bowel dilatation. We proceeded with exploratory laparotomy, intraoperative showed left obturator hernia of Richter type. Small bowel resection with primary anastomosis and simple closure of defect done. Patient was discharged home well. This case report shares our experience in managing obturator hernia in a district hospital with limited source of imaging.

Keywords: Obturator hernia, Richter hernia, Small bowel obstruction.

1. Introduction

Obturator hernia is rare but poses the highest mortality due to its rarity and challenging in diagnosis. It usually occurs in elderly, emaciated, multiparous women who has increased intra-abdominal pressure. The presentation is non-specific but most presented with intestinal obstruction with absent of significant clinical sign that usually appear in other hernias. The diagnosis usually aids by computed tomography (CT) imaging or intra-operative. Early diagnosis and intervention are essential in reducing morbidity and mortality.

2. Case Report

A 72 years old skinny woman with body mass index of 22kg/m^2 , multiparous of para 8, who has no previous medical or surgery history. She presented with abdominal pain, vomiting and no bowel output for 3 days. She has been having intermittent constipation for past 1 year with no constitutional symptoms.

Figure 1: Sentinel loop of small bowel

Clinically she was dehydrated. Her abdomen was distended with no sign of peritonism and bowel sound was present. However, there was no prominent swelling at abdomen or groin area. Digital rectal examination was

unremarkable. Nasogastric tube showed bilious content. Laboratory investigations showed acute kidney injury with hyponatremia and hypochloremia, blood gas was not acidotic and other electrolytes were within normal range. Abdominal x-ray showed sentinel loop of small bowel dilatation (Figure 1).

We proceeded with exploratory laparotomy, small bowel resection with primary anastomosis and simple suture closure of left obturator foramen. Intraoperative showed left obturator hernia. Richter type of hernia with segment of small bowel ischemic (Figure 2). Patient had speedy recovered and was discharged home at day 6. She was reviewed post operation 1 month in clinic follow up and there was no recurrence.

Figure 2: Richter type of hernia with segment of small bowel ischemic

3. Discussion

Obturator hernia is about 1% but consists the highest mortality rate of 13-40% among all abdominal wall hernias [1]. It is also known as “little old lady hernia” as it is commonly occurs in elderly, thin, emaciated, multiparous women. It is 6-9 times more common in women due to their broader pelvis and greater transverse diameter. Atrophy and loss of pre-peritoneal fat around obturator canal following ageing with increase intra-abdominal pressure predisposed to protrusion of content through the obturator canal. However, it is less common occurs over left side as the obturator canal is protected by sigmoid colon and it can happen bilaterally in 20% of cases [2].

Clinical diagnosis is challenging as there is no specific signs and symptoms which led to delay in diagnosis that causes high mortality in obturator hernia. Most literature has shown that patients usually presented with intermittent intestinal obstruction which is often partial as high proportion exhibiting Richter type of herniation. In this case, patient presented with clinical signs and symptoms of small bowel obstruction with background history of intermittent constipation. The Howship-Romberg is pathognomonic sign but only present in 15-50% of cases. It is described as inner thigh pain when internal rotation of the hip due to obturator nerve irritation.

CT scan is the most accurate imaging and has a sensitivity of 90% in early diagnosis and intervention of obturator hernia. However CT scan does not reduce the rate of bowel resection and mortality as most patient presented late with strangulated bowels of up to 75% [3,4]. Ultrasonography is easily available however it is operator dependent and difficult in detecting obturator hernia. In view of limited source of imaging at our district hospital setting and ultrasound has no advantage over CT scan, we proceeded with surgery for this patient.

Surgery is the mainstay of treatment for obturator hernia. Literature has described regarding several open and laparoscopic techniques. Midline laparotomy is most common open approach in emergency setting as it has better exposure to obturator ring and facilitation of bowel resection in case of strangulation. Laparoscopic approach has superior outcome as patient experience less postoperative pain, reduce length of stay and fewer pulmonary complications [5]. However, this approach is challenging to surgeons as bowels are dilated and possibility of strangulation which require conversion to open surgery. Hernia defect can be repaired with simple suture closure or mesh replacement but simple closure of hernia defect is preferred in case of bowel resection [6]. Simple suture closure has an acceptable recurrence rate of less than 10% [7]. Our patient was repaired using simple suture closure and there is no recurrence during follow up.

4. Conclusion

Obturator hernia is rare and associated with high mortality due to its challenging in diagnosis. A high index of suspicion for obturator hernia is crucial especially when assessing elderly, thin female with small bowel obstruction particularly with intermittent symptoms and no previous history of abdominal surgery. CT imaging is the gold standard. Early diagnosis and intervention is critical for better outcome.

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