Obturator hernia should be considered in the differential diagnosis of hip and knee pain

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ABSTRACT

Obturator hernia is a rare disease usually occurring in debilitated elderly women. Pain radiating down the medial thigh and knee (Howship-Romberg sign) is a specific sign of the disease. Presently described is a case of obturator hernia in a 73-year-old female patient who presented with severe left hip pain radiating down the medial thigh and knee, nausea, and loss of appetite. Initially, vertebral disc herniation was thought to be cause, but abdomino-pelvic computed tomography scan revealed left strangulated obturator hernia. Diagnosis of obturator hernia can be challenging. Physicians should consider obturator hernia in the differential diagnosis of knee and hip pain, and investigate for Howship-Romberg sign. Early diagnosis of the disease not only decreases morbidity and mortality, but also presents opportunity to treat with minimally invasive methods.

Key words: Acute abdomen; hernia; hip pain; knee pain; obturator hernia.

INTRODUCTION

Obturator hernia is a rare disease accounting for only 0.05% to 1.4% of all hernias.[1] It is seen most often in thin and weak elderly women. Pain radiating down the medial thigh and knee (Howship-Romberg sign) is a specific sign of the disease. Therefore, obturator hernia can manifest as hip or knee pain. A case of obturator hernia is described and diagnostic challenges of the disease are discussed.

CASE REPORT

A thin and debilitated 73-year-old female presented at the emergency department with severe left hip pain radiating down the medial thigh and knee, nausea, and loss of appetite. There was no abdominal pain or vomiting in the history of present illness. Limitation of left hip movement was found in her physical exam, as well as minimal abdominal tenderness without rebound tenderness or defense. Herniated vertebral disc lesion was initially considered in the differential diagnosis. Patient had consultation with both a neurosurgeon and a general surgeon. Dorso-vertebral magnetic resonance imaging was performed and no abnormalities were found. Abdomino-pelvic computed tomography (CT) scan revealed left strangulated obturator hernia (Fig. 1). Laparotomy was performed with midline incision and strangulated small intestinal segment was reduced from the hernia sac. Ileal segment of 15 cm was resected and reconstructed with end-to-end anastomosis due to non-viability (Fig. 2). Neck of obturator hernia was repaired with prolene sutures. Postoperative recovery period was uncomplicated and Howship-Romberg sign was resolved.

DISCUSSION

Obturator hernia accounts for only 0.05–1.4% of all hernias.[1] Females are at 6 to 9 times higher risk than males due to wider pelvis. Advanced age, weight loss, conditions that increase abdominal pressure such as constipation, chronic pulmonary disease, or ascites are other risk factors. Most common presenting signs are bowel obstruction and Howship-Romberg sign. Hannington-Kiff sign, the loss of adductor reflex of the

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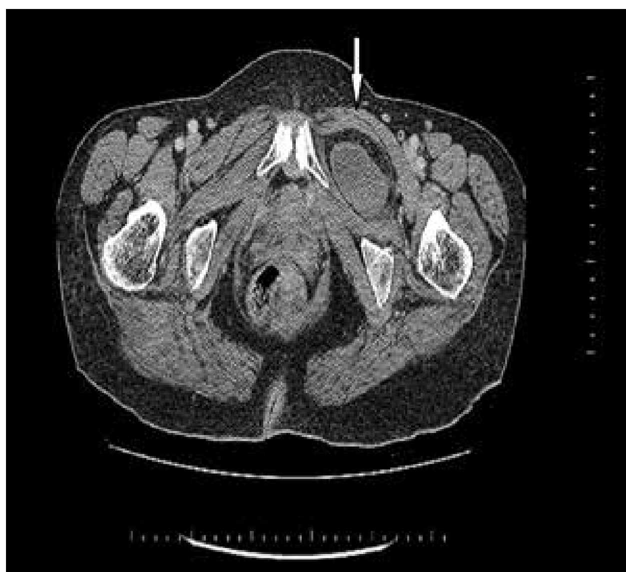

Figure 1. Computed tomography image with arrow indicating left obturator hernia.

Figure 2. Strangulated intestinal segment as seen during surgery.

thigh with a normal patellar tendon reflex, is a more specific finding of the disease.[2]

Diagnosis of obturator hernia is usually difficult. Physical examination, ultrasonography, CT scan, laparoscopy, and laparotomy are useful. According to Kulkarni et al., CT scan has superior sensitivity and accuracy compared with other noninvasive diagnostic tools.[3] Early diagnosis of obturator hernia prevents complications such as strangulation and perforation, and thereby reduces mortality and morbidity. As result of diagnostic difficulty, frequently intestinal segment has been ischemic for a long time and can easily be perforated when reducing it from the hernia sac. Perforating the intestinal segment may increase risk of complications such as intra-abdominal abscess. Moreover, delay in diagnosis may cause electrolyte imbalance or renal insufficiency, which may impair the healing process of any necessary intestinal anastomosis.[4]

Regarding treatment of obturator hernia, abdominal, retropubic, obturator, and inguinal surgical approaches have been used in non-emergent settings. However, abdominal approach must be preferred in an emergency situation to explore for complications such as strangulation or perforation. Hernia sac must be inverted and ligated after sac is reduced. Stump should be repaired with mesh, Teflon, fascial flap, or primary sutures. It can also be covered with a segment of the omentum. Laparoscopic approaches for obturator hernia have also been defined during the past 2 decades.[5,6] Furthermore, Togawa et al.[7] demonstrated the feasibility of minimal incision trans-inguinal repair.

In conclusion, obturator hernia is a rare disease and diagnosis is usually challenging. Physicians should consider obturator hernia in differential diagnosis of knee and hip pain, and probe for Howship-Romberg sign. Early diagnosis of the disease not only decreases morbidity and mortality, but allows for use of minimally invasive treatment methods.

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OLGU SUNUMU - *ÖZET*

Obturator herni kalça ve diz ağrısının ayırıcı tanısında yer almalıdır

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Obturator herni tüm hernilerin yaklaşık olarak %0.05–1.4'ünü oluşturan nadir bir hastalıktır. Genellikle zayıf, yaşlı ve düşkün kadınlarda görülmektedir. Uyluk iç kısmından dize yayılan ağrı (Howship Romberg bulgusu) hastalığa özgüdür. Bu yazıda, obturator fıtık tanısı alan bir hasta ve obturator fıtığın tanısal güçlükleri sunuldu. Yetmiş üç yaşında düşkün bir hasta, bulantı, iştahsızlık ve sol kalçasından uyluk iç kısmına ve dize yayılan şiddetli ağrı şikayeti ile acil servise başvurdu. Öncelikli vertebral disk hernisi düşünülen hastanın çekilen abdomino-pelvik bilgisayarlı tomografisinde sol obturator fıtık saptandı. Obturator fıtık tanısı güç olan nadir bir hastalıktır. Hekimler kalça ve diz ağrısının ayırıcı tanısında obturator fıtığı dahil etmelidirler ve lüzüm halinde Howship Romberg bulgusunu sorgulamalıdırlar. Erken tanı konulması hem mortalite ve morbiditeyi azaltmaktadır hem de daha az invaziv yöntemlerle tedavi olanağı sunmaktadır.

Anahtar sözcükler: Akut batın; diz ağrısı; fıtıklar; kalça ağrısı; obturator fıtık.

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