

Intestinal Perforation In The Hernia Sac Due To A Blunt Trauma: A Case Report

Travna Yüzünden Fitik Kesesi İçinde İntestinal Perforasyon: Olgu Sunumu

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Gaziantep Tıp Dergisi 2009;15(2):38-40.

Özet

Inguinal herni en sık görülen herni tiplerinden bir tanesidir. Herni kesesi içerisindeki ince barsak perforasyonu veya nekrozu gibi komplikasyonlar ciddi durumlarla sonuçlanabilir. Olgumuzda olduğu gibi kasık bölgesine künt travma, herni varlığında fitik kesesi içindeki ince barsak perforasyonuna yol açabilir.

Anahtar Kelimeler: İnce barsak perforasyonu, İnguinal herni, Travma

Abstract

Inguinal hernia is one of the most common forms of hernias. The complications such as necrosis or perforation of intestine in the hernia sac result in hazardous conditions. A blunt trauma to the inguinal area may cause intestinal perforation in the presence of an inguinal hernia as our case.

Key Words: Intestinal Perforation, Inguinal Hernia, Trauma

Introduction

Hernia is protrusion of the abdominal contents outside of abdominal cavity through a natural or acquired defect of the abdominal wall. Inguinal hernias are the most common forms of hernias. The hernias are generally reducible. Necrosis and perforation of the abdominal contents protruded from abdominal cavity to the hernia sac are the most common complications of unprepared hernias. A blunt trauma to inguinal region in a patient with inguinal hernia can cause intestinal perforation (1,2).

Intestinal perforation in the hernia sac caused by blunt abdominal trauma has been reported only in few cases in the literature (3-5). In this case we report a patient with perforation of the intestine in the hernia sac caused by a blunt inguinal trauma.

Case Report

A 64-year-old male patient was admitted to emergency service with no passage of gas, stool and abdominal pain. Two days before the admission he had pain starting at the right inguinal region shifting to the abdomen after blunt abdominal trauma. There were abdominal tenderness and muscle guarding on physical examination. He had the diagnosis of a right inguinal hernia 10 years earlier but he had refused an operative repair since then. The hernia was manually reduced. There were air-fluid levels on the plain X-ray of the abdomen (Figure 1). Abdominal ultrasound examination revealed free abdominal fluid between the intestinal segments in the pelvic space. His leukocyte count was 22,000/mm³.

After the initial assessment and preparation of the patient, a laparotomy was performed through a midline incision. At surgery, revealed disseminated intestinal content and 0,5cm long perforation in 7 cm edematous viable ileum segment at 80 cm proximal of ileocaecal valve.

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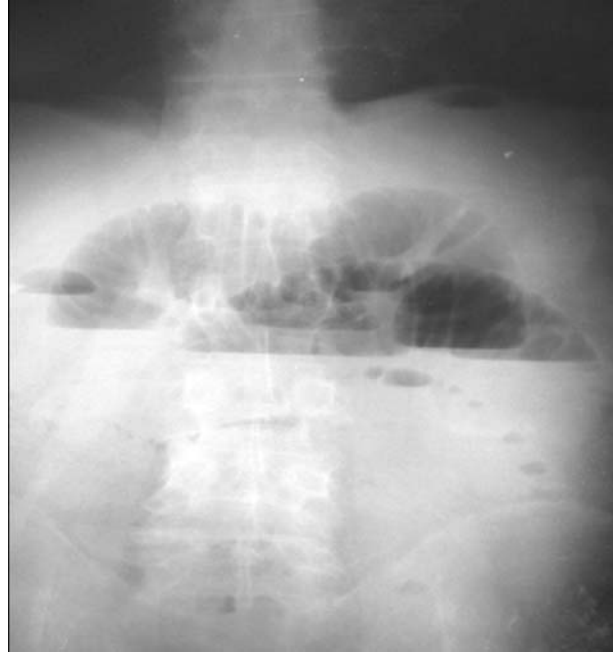


Figure 1. The plain X-ray of the abdomen shows the air-fluid levels in the traumatic patient.

Primary closure of the intestinal perforation and tension-free hernia repair were performed in the same session. On post-operative 11th day he was re-operated for evisceration. Abscess was revealed at explorative laparotomy. Drainage and primary fascia closure were performed. In the post-operative period he has worsened gradually and we lost the patient due to septic shock on post-operative 10th day after the second operation.

Discussion

Traumatic intestinal perforation rates were higher in patients with inguinal hernias than in the healthy population (6). The localizations of hernia of these patients are usually at the right inguinal region. In our case the blunt trauma was to the right inguinal hernia region. Intestinal perforations with inguinal hernia due to blunt trauma are localized at 60% in ileum, 10% in jejunum, 4% in colon. Twenty-six percent of them are not specifically localized (1). In our patient the perforation was localized in ileum. Ileum is fixed to the ileocaecal valve. So lack of mobility of ileum with a blunt trauma describes the reason of the higher rates of ileal perforation in inguinal hernia sac due to blunt trauma to the inguinal region (7,8).

Radiological examinations are not specific for diagnosis. There were air fluid levels on the plain X-ray radiograph of the abdomen and ultrasound examination recognized free abdominal fluid. In our opinion for the best exposure and drainage of the intestinal content, laparotomy should be preferred in patients with suspecting of intestinal perforation in the hernia sac due to blunt trauma. But some writer recommended waiting to patients worsening at that suspicion of perforation.

The treatment of small bowel perforation due to a blunt trauma to the hernia sac is primary closure or segmental resection and anastomosis (1,2,4).

Laparoscopic repair also can be the choice of the treatment (7). It is still controversial whether or not an inguinal hernia should be repaired at the same session of the treatment of intestinal perforation in the patients with intestinal perforation in the hernia sac due to blunt trauma. Some authors prefer hernia repair two months later after the treatment of intestinal perforation with widespread peritonitis (2,6).

Nussbauman at al. performed a laparoscopic hernia repair and a simple closure of the intestinal perforation in the same session (5). Inguinal hernia treatment shouldn't be delayed. Severe abdominal pain in a patient with a blunt trauma to the inguinal region with inguinal hernia should be suspected as intestinal perforation in the hernia sac.

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