An Unusual Complication of Cholecystitis of Porcelain Gall Bladder

Porselen Safra Kesesi Kolesistitinin Olağandışı Komplikasyonu

Kolesistite Sekonder Cilt Altı Absesi / Subcutaneus Abcess Secondary to Cholecystitis

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Özet

Karın ön duvarına penetre olan safra kesesi kolesittit atağı takiben oluşan abdominal duvar abseli vakayı rapor ettik. 47 yaşında erkek hasta karın sağ bölgesinde ağrı ve kitle şikayeti ile hastanemize başvurdu. Bilgisayarlı karın tomografisi ön karın duvar kasları arasında geniş multilokule koleksiyon gösterdi. Ultrason görüntülemede porselen kese, intrahepatic safra yollarında hava ve intraperitoneal kavitede sıvı kolleksiyonu gösterdi. Absenin ultrason eşliğinde drenajı takiben laparotomik kolesistektomi uygulandı ve hasta kurtarıldı. Safra kesesi kolesistit atağı karın duvarın penetre etmiş ve abse oluşumuna neden olmuştur. Literatürü kısaca gözden geçirerek kolesisitit atağı takiben gelişen karın duvarı absesini sunduk.

Anahtar Kelimeler

Karın Ön Duvarı; Abse; Kolesistit; Komplikasyon

Abstract

We report a case of abdominal wall abscess caused by a cholecystitis attack of gall bladder penetrating through the anterior abdominal wall. A 47-year-old man admitted to hospital complaining of abdominal pain and a mass in the right side of the abdomen. An abdominal computed tomography scan showed a large multiloculated collection between the anterior abdominal wall muscles. Ultrasound scan (USS) showed a porcelain gall bladder, air in the intrahepatic biliary tract and a fluid collection extending into the intraperitoneal cavity. After USS guided percutaneous drainage of the abcess, cholecystectomy was performed at laparatomy, and the patient recovered. A cholecystitis attack of gall bladder had penetrated through the abdominal wall, leading to the formation of an abscess. We briefly review the relevant literature and report an anterior abdominal wall abscess subsequent to attack of cholecystitis.

Keywords

Anterior Abdominal Wall; Abscess; Cholecystitis; Complication

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Introduction

Diseases of biliary tract are one of the rare primary sites for the development of anterior abdominal wall abscess. Recent reports have indicated that an abscess of anterior abdominal wall was an unusual presentation of gallbladder empyema [1]. Porcelain gallbladder may cause an abscess and fistula formation to the anterior abdominal wall or may cause cholecystoduodenal fistula [2,3]. We briefly review the relevant literature and report a rare case of a 47-year-old male with an anterior abdominal wall abscess subsequent to attack of cholecystitis. The entity was recognized on CT and diagnosed on ultrasound. Although this is a rare complication of cholecystitis, it should be recognized as potential source of abdominal wall abscess formation, even in patients presenting an attack of cholecystitis.

Case

A 47-year-old male, presented with a mass in the right side of the abdomen, along with generalized abdominal pain and fewer of 1 week duration was admitted to the hospital. There was also a 1 month history of right upper abdominal pain.

On physical examination he had a temperature of 38.3'C, heart rate of 92/min and blood pressure 120/80 mmHg. A large, tender and non-mobile mass was palpable in the right lumbar and iliac regions of the abdomen, extending from the right flank up to the umbilicus. There was no other significant finding on clinical examination.

Laboratory investigations revealed haemoglobin of 14.0 gm/dl, with normal renal and liver functions, a prothrombin time index (PTI) of 75%, and a normal serum amylase and lipase levels. The results of chest X-ray, urinalysis and blood culture were negative. X-ray of the abdomen showed gas shadows in the right lower abdomen. Ultrasonography (US) of the abdomen showed porcelain gall bladder, air in the intrahepatic biliary tract and a fluid collection extending into the intraperitoneal cavity and between the anterior abdominal wall muscles which on aspiration revealed thick pus. Computed Tomography (CT) scan showed a large multiloculated collection of 15x5cm in dimensions between the anterior abdominal wall muscles extending from upper to lower pole of the right kidney [Figure-1]. A double contrast barium enema showed irregularity of the contour of the transvers colon.

Sefaperazon-sulbactam and metronidazole IV b.i.d. were given to the patient. Percutaneous drainage of the abscess was performed with ultrasound guidance. Microbiological culture of the aspirated fluid revealed as E.Coli. Echinococcus IgE and hydatic hemaglutination tests were revealed as negative. Laparatomy was performed after a diagnostic laparoscopy. On the exploration, the gall bladder had thickened walls, and a large 1 cm x 1 cm perforation at the fundus that was densely adherent to the abscess cavity on anterior abdominal wall. Cholecystectomy was performed at laparatomy, and the patient recovered.



Figure 1. Abdominal CT scan; a large multiloculated collection of 15x5cm in dimensions between the anterior abdominal muscles was seen.

Discussion

Diseases of the biliary tract is one of the rare primary sites for the development of anterior abdominal wall abscess. Recent reports have indicated that abscesses of anterior abdominal wall was an unusual presentation of gallbladder empyema [1]. Porcelain gallbladder may cause an abscess and fistula formation on the anterior abdominal wall or may cause cholecystoduodenal fistula [2,3]. We report a case of anterior abdominal wall abscess. The entity was recognized on CT and diagnosed on ultrasound.

The biliary tract is a rare primary site for the development of anterior abdominal wall abscess. Abscess formation was frequently seen as a late complication of gallstones spilled during laparoscopic cholecystectomy [4,5]. Abscess may develop retroperitoneally as an unusual complication of cholecystitis and choledocholithiasis [6].

In the present case, we believe that a pericholecystic collection may have ruptured and penetrate into the peritoneum of anterior abdominal wall.

Paswlaski et al. resented their experiences in using different diagnostic modalities in evaluating abdominal abscesses and reported that CT is imaging modality of choice in revealing abdominal abscess and also CT and US are very useful in nonoperative therapies, including US and CT guided drainage [7].

To our knowledge this is the first case report in English of such an anterior abdominal wall abscess complication caused by attack of cholecystitis. Although this is a rare complication of cholecystitis, it should be recognized as potential source of abdominal wall abscess formation, even in patients presenting an attack of cholecystitis.

Concerning a mass in the abdominal wall, particularly one in the right lower quadrant, differential diagnosis should include complication of an attack of cholecystitis.

Competing interests

The authors declare that they have no competing interests.

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