



Olgu Sunumu/Case Report

Rectus Sheath Abscess After Appendectomy

Apendektomi Sonrası Görülen Rektus Kılıf Apsesi

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ABSTRACT

Rectus sheath abscess is a rare condition with high risk of morbidity and mortality. We presented an abscess formation at rectus sheath after appendectomy. Rapid diagnosis with directed history, physical examination, and computerized tomography of the abdomen may help for the correct management of rectus sheath abscess.

Key Words: Appendectomy, Complication, Rectus Sheath Abscess

ÖZET

Rektus kılıfı absesi yüksek mortalite ve morbidite oranı ile nadir görülen durumlardandır. Burada appendektomi yapılmış ve rektus kılıfında apse gelişmiş vakayı sunduk. Hastanın hikayesi, fizik muayenesi ile beraber karnın bilgisayarlı tomografi ile değerlendirilmesi hızlı tanı ve hastanın doğru bir şekilde değerlendirilmesi ve tedavisinin doğru bir şekilde planlanması açısından önemlidir.

Anahtar Kelimeler: Apendektomi, Komplikasyon, Rektus Kılıf Absesi

INTRODUCTION

Acute appendicitis which is one of the common abdominal emergencies, occur about % 8 of Western population in any time of their life period¹. For the treatment of acute appendicitis, appendectomy is necessary. After appendectomy, complications such as wound infection, intra-abdominal abscess, small bowel obstruction and appendicocutaneous or appendicovesical fistulas can be seen². The most common one among these is surgical site infections including wound infection and related abscess seen in %5 patients who are operated for uncomplicated appendicitis³. Wound infections can be cured easily with simple procedures ,whereas intra-extra abdominal abscess which is more difficult to treat, has a great risk for sepsis. Correct diagnosis and management must be done as soon as possible. Ultrasound and computed tomography scan are helpful technics for localizing the abscess⁴. We presented an abscess formation which showed different extension to rectus sheath after appendectomy.

CASE

22 years old male who had a standart appendectomy procedure twelve days ago at an other hospital, was admitted to emergency departmant with abdominal pain and fever for the last three days. He had been treated with

cefazolin sodium for two days after the surgery and discharged on the post operative third day. On admission, his pulse rate was 115/min. His blood pressure was 100/55mmHg. He was pyrexia (38.8°C). His abdominal examination revealed: appendectomy scar noticed at the right lower abdominal area, generalized abdominal tenderness and guarding, visible and palpable swelling in the right side of abdomen with the signs of inflammation (Figure 1). The laboratory test results showed a leukocytosis of 15,100/mm³ with a shift to the left. An abscess formation at rectus sheath originating from the caecum and an other abscess near the caecum was detected at computerized tomography (CT) scan (Figure 2). He had underwent an operation urgently. At laparotomy, the appendectomy stubby was clinged tightly to the anterior abdominal wall. The adherance was dissected. A fistulization to rectus sheath was detected. An abscess fluid was coming from the fistula. An other abscess was found near the caecum and drained. The stubby and the fistula opening were revised , removed and the sutured. The rectus sheath was opened at four different location on anterior part and drains were placed after the abscess drainage and irrigation. According to the infection committee consultation, he was treated with intravenous ampicillin-sulbactam and metronidazole for 7 days. The postoperative period was uneventful.



Figure 1: Patient with appendectomy scar , The white arrow indicates swelling at the right abdominal wall

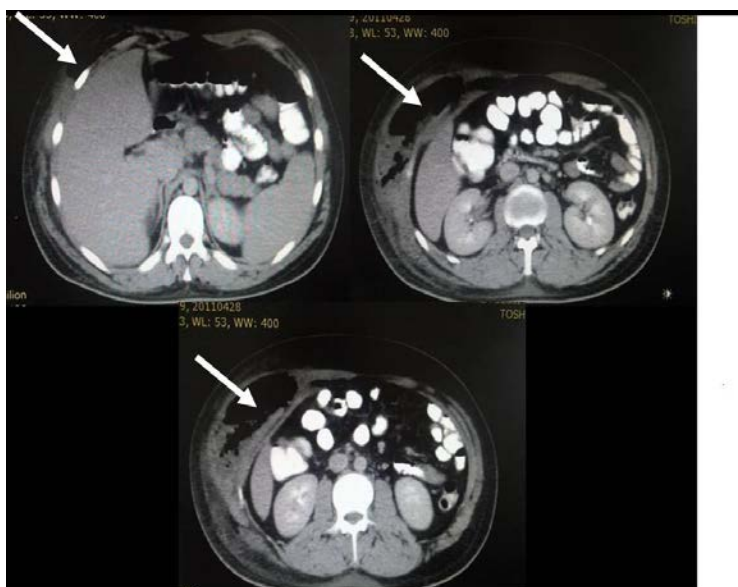


Figure 2: Computed tomography scan shows loculation with air pockets and fluid collection in the right rectus sheath. The white arrows indicates an abscess.

DISCUSSION

Acute appendicitis is one of the common surgical abdominal emergencies which needs early intervention to prevent serious complications³. Although preventive procedures applied in early period, we can face with complications after surgery such as wound infections, intra-extra abdominal abscess, small bowel obstruction and appendicocutaneous or appendicovesical fistulas². Surgical site infections including wound infections and related abscess are the leading complications. The frequency rate differs according to presence of complicated appendicitis formation. If there is no abscess, phlegmon or delayed entrance to the hospital as later than 48 hours, it is called as uncomplicated appendicitis. In this situation, the complication rate is % 5 of the patients who had undergone appendectomy³. But if in any of the situations which are defined above present, the expected complication rate after the surgery increases. Even some of these complications which are seen after

the surgery, can be cured with simple procedures, the others such as abscess formation due to localization has a great risk for sepsis and needs correct diagnosis and management as soon as possible.

Abscess formation after appendectomy is usually expected in close quarter to caecum or pelvic region in the abdominal area. Sometimes these abscess can be fistulized to rectus sheath by the access route of abdominal area during surgery. In this case, there can be a potentially serious state. As an infection can easily scatter in the rectus sheath, patient could step into sepsis. Imaging studies of abscess are important for the surgical management algorithm formation. Ultrasound has a great sensitivity for discrimination of the abscess from any other collection. But computerized tomography has role for measurement and localization of abscess in the abdomen⁴.

After the localization of the abscess, urgent drainage is obligatory with antibiotic treatment. According to localization of the abscess, percutaneous drainage can be performed. In other cases, surgery is the first option for the drainage. In our case, we have preferred surgery because of multiple abscess formation in different areas.

Antibiotic usage is important for acute appendicitis treatment. For nonperforated appendicitis, single dose of preoperative antibiotics is recommended as it covers the aerobic and anaerobic colonic flora. By the help of single dose of preoperative antibiotic prophylaxis, postoperative wound infection and intra-abdominal abscess formation rate decreases⁵. Taylor et al states that oral antibiotics taken at the postoperative period do not decrease the incidence of infectious complications after appendectomy⁶. For the complicated appendicitis surgery, at the postoperative period some of the authors recommend the usage of intravenous antibiotic until the patient state become afebrile⁷. In our case the patients has been treated with antibiotics for two days after appendectomy.

Also rectus sheath abscess can occur because of other pathologies. One of the pathology is the infection of hematomas^{8,9} that can be related with trauma or surgery. The abscess formation in the rectus sheath is injury to the abdominal vessels as usually seen with trocar insertion at laparoscopic procedure. This condition can lead to accumulation of large amount of blood and pus causing abscess formation^{10,11}. Therefore, in order to avoid this complication, the abdominal wall anatomy must be known perfectly. An other cause of abscess can be foreign body inserted to abdominal wall. Although it is very rare, Noushif et al has reported rectus sheath abscess caused by ingested metallic needle¹².

Appendectomy is one of the most common surgical procedures performed. This case describes a rare but significant complication of appendectomy and illustrates an abscess formation at rectus sheath after appendectomy.

Rapid diagnosis with directed history, physical examination, and computerized tomography of the abdomen may help for the correct and immediate management of patients having rectus sheath abscess.

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