CASE REPORT / OLGU SUNUMU

Type 1 Rectus Hematoma Presented with Diarrhea; A Rarely Diagnosed Case

İshal ile Prezente Olan Tip 1 Rektus Hematomu; Nadiren Tanı Konulan Bir Olgu

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ABSTRACT

Aim: Acute abdominal pain is one of the common reasons for emergency room admissions. Although rectus sheath hematoma is rare, it can be mistakenly diagnosed as an acute abdomen. This study, it is aimed to present a case of type 1 rectus sheath hematoma, which is thought to have occurred after straining with excessive defecation due to diarrhea.

Case Report: A 30-year-old male patient was admitted to the emergency department with severe abdominal pain, diarrhea, and a palpable mass in the abdomen. On physical examination, there was a palpable mass in the right lower quadrant of the abdomen, severe tenderness on palpation, rebound, and defense. While the blood tests of the patient, who did not have a known disease, drug use, and trauma history, were within normal limits, ultrasonography revealed a hematoma with a thickness of 2-2.5 cm in the widest part of the posterior rectus muscle. Control blood tests were also found to be normal. Computed tomography of the abdomen revealed unilateral, intramuscular hematoma without facial invasion. The patient, who was also seen by general surgery, was discharged with the recommendation of outpatient clinic control.

Conclusion: Rectus sheath hematoma is a diagnosis that should be considered in the differential diagnosis in patients admitted to the emergency department with abdominal pain. Although it is rare, it should be kept in mind that it may be associated with frequent defecation episodes due to diarrhea, as in this case, for example, Early intervention is often the most important factor in preventing mortality in some patients with serious comorbidities. The cases mostly respond positively to conservative treatment for etiology.

***Keywords*:** Computed tomography, Rectus sheath hematoma, Emergency, Acute abdomen

ÖZ

Amaç: Akut karın ağrısı, acil servise başvuruların en yaygın nedenlerinden biridir. Rektus kılıf hematomu nadir olmakla birlikte yanlışlıkla akut karın olarak teşhis edilebilir. Bu çalışmada, ishale bağlı aşırı dışkılama ile ıkınma sonrası ortaya çıktığı düşünülen tip 1 rektus kılıf hematomu olgusunun sunulması amaçlanmıştır.

Olgu Sunumu: 30 yaşında erkek hasta şiddetli karın ağrısı, ishal ve karın bölgesinde ele gelen kitle ile acil servise başvurdu. Fizik muayenede karnın sağ alt kadranda ele gelen kitle, palpasyonda şiddetli hassasiyet, ribaund ve defans mevcuttu. Bilinen bir hastalığı, ilaç kullanımı ve travma öyküsü olmayan hastanın kan tetkikleri normal sınırlar içindeyken, ultrasonografide arka rektus kasının en geniş kısmında 2-2,5 cm kalınlığında hematom saptandı. Kontrol kan testleri de normal bulundu. Batın bilgisayarlı tomografisinde fasyal invazyonu olmaksızın tek taraflı, kas içi hematom saptandı. Genel cerrahi ile de görülen hasta poliklinik kontrol önerisi ile taburcu edildi.

Sonuç: Rektus kılıfı hematomu acil servise karın ağrısı ile başvuran hastalarda ayırıcı tanıda düşünülmesi gereken bir tanıdır. Nadir olmakla birlikte, bu durumda olduğu gibi, ishal nedeniyle sık defekasyon ataklarıyla ilişkili olabileceği akılda tutulmalıdır, örneğin, ciddi komorbiditeleri olan bazı hastalarda erken müdahale, mortalitenin önlenmesindeki en önemli faktördür. Vakalar çoğunlukla etyolojiye yönelik konservatif tedaviye olumlu yanıt vermektedir.

Anahtar Kelimeler: Bilgisayarlı tomografi, Rektus kılıf hematomu, Acil, Akut karın

Introduction

Acute abdominal pain is one of the common causes of emergency admissions. To evaluate the abdominal pain correctly and to give good care to the patient, it is necessary to know the patient's history well, as well as the causes and mechanisms of intra-abdominal and extra-abdominal pain.

In the literature, pain that lasts less than a week is defined as acute pain. Such patients should be evaluated and diagnosed rapidly (1). When patients with abdominal pain are examined, only one-third of them have an underlying surgical cause. Rectus sheath hematoma (RHD) emerges as a disease that can be seen especially in elderly patients using anticoagulant drugs. Its clinic imitates the acute abdomen. For this reason, unnecessary surgical interventions can be encountered by misdiagnosis (2, 3). Although the most important predisposing factor is the use of anticoagulant therapy, it can also occur due to various reasons such as hematological diseases, physical exercise, trauma, sneezing, cough, hypertension, and pregnancy. It is seen as a tear in the abdominal rectus muscle that causes hematoma or in the arteries and branches of this muscle. It has been determined that this tear is often localized to the abdominal walls located in the lower part of the umbilicus (4, 5).

Case Report

A 30-year-old male patient was admitted to the emergency service with severe abdominal pain, palpable mass in the abdomen, and diarrhea, and difficult defecation. Physical examination revealed a palpable mass in the right lower quadrant of the abdomen, and severe tenderness, rebound, and defense on palpation. The blood tests of the patient, who had no known illness, drug use, and history of trauma, were within normal limits: hemoglobin 16.7g / dL, platelet 231 K / mm3, creatinine 0.80mg / dL, BUN (blood urea nitrogen): 32.1mg / dL. In the ultrasonography (picture 1A), a 2-2,5 cm thick hematoma was detected in the widest part of the posterior rectus muscle. Control blood tests were found to be hemoglobin 15.2 g / dL, platelet 220 K / mm3, creatinine 0,78 mg / dL, BUN: 32.1 mg / dL. Abdominal computed tomography revealed no additional pathology other than a well-circumscribed rectus sheath hematoma. The patient, who was also seen by general surgery, was discharged with the recommendation of outpatient clinic control. Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

Discussion

Rectus sheath hematoma; occurs as a result of bleeding in the sheath slightly surrounding the M. Rectus abdominis and M. Pyramidalis muscles due to damage to the epigastric artery or cuffs (6). When the causes of the disease are examined in patients with rectus sheath hematoma, trauma, previous surgery, anticoagulant therapy, leukemia, hemophilia, collagen tissue disease, and in people with systemic diseases such as malignancy, myopathy, obesity, ischemic heart disease, and hypertension, cardiovascular system diseases or may occur spontaneously (7). Rectus sheath hematoma; generally shows a benign character and is a cause of acute abdominal pain that limits itself as a result of conservative treatment and causes a life-threatening progression (8). It was found to be seen as 80% in the lower quadrant and 60% in the right side.

As a result of the increased use of antiaggregant and anticoagulant treatments in recent years, the incidence of rectus sheath hematomas has increased (9). Rectus sheath hematoma constitutes 2% of unexplained abdominal pain (10). In the physical examination, a mass in the abdominal wall with a rate of 63% is detected (11, 12). Ultrasonography is primarily used to determine rectus sheath hematoma. Ultrasonography is seen as the first choice in diagnosis in terms of being quickly and easily accessible, rapid, and providing information about the location of the mass, but it has been found that tomography gives more meaningful results than this. Ultrasonography provides accurate information about the localization and size of the mass. Computed abdominal tomography is used for typing the rectus sheath hematoma, and its sensitivity and specificity are accepted as 100% (13).

Rectus sheath hematomas are divided into three. These; varies according to the anatomical structure, size, and localization. In Type 1, there is no intramuscular, unilateral, facial plane spread, and there is no decrease in hemoglobin value. Conservative outpatient follow-up is recommended in type 1. In Type 2, there is a unilateral or bilateral extension to the facial plane. There is no spread in the perivesical area. There may be a decrease in the hemoglobin value. Type 2 short-term hospitalization can be made and transfusion may be required. In Type 3, on the other hand, bilateral, facial plane and intraperitoneal and perivesical spreading are found. There is a serious decrease in the hemoglobin value, and accordingly, hemodynamic deterioration may occur. Long-term hospitalization, transfusion of blood and blood products, and surgical intervention may be required in these patients (14). This classification plays a guiding role for the emergency physician during the consultation process and treatment. The patient we examined; was evaluated as a type 1 rectus sheath hematoma. The patient we examined; The patient was discharged with the general surgeon's opinion due to the lack of comorbidity, drug use, no significant decrease in hemoglobin level, and a stable course in the short-term follow-up.

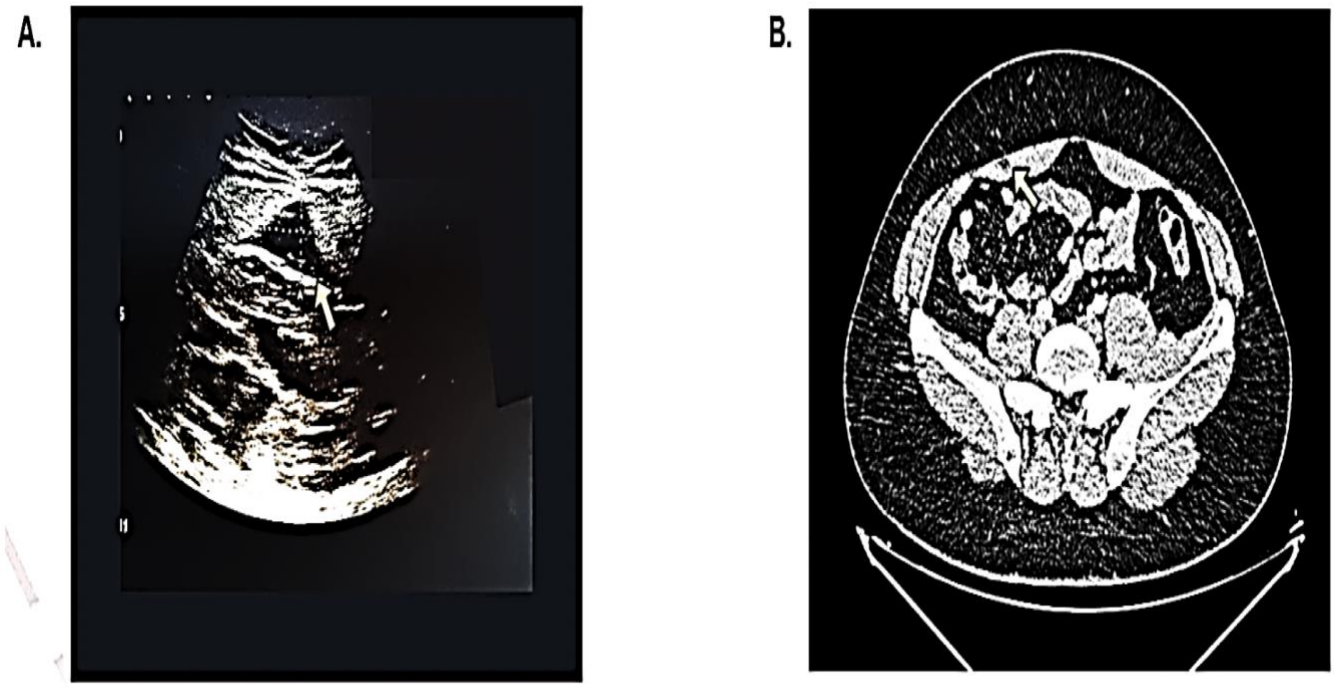

Figure 1. A. Rectus sheath hematoma in USG and B. Rectus Sheath Hematoma in CT

Conclusion

Rectus sheath hematoma should be considered in the diagnosis of patients presenting to the emergency department with abdominal pain. Although it is rare, it should be kept in mind that it may be associated with frequent defecation episodes due to diarrhea, as in this case example. Early intervention is often the most important factor in preventing mortality in some patients with serious comorbidities. The cases mostly respond positively to conservative treatment for etiology.

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References

1. Kaya E, Kuvandik G, Karakuş A, et al. Evaluation of physical examination findings in acute abdominal patients who apply to emergency service. Middle East Journal of Internal Medicine 2013;6(2):3-8.1.
2. Cherry WB, Mueller PS. Rectus sheath hematoma: review of 126 cases at a single institution. Medicine (Baltimore) 2006; 85: 105- 10.
3. Zengin K, Carkman S, Kiliç I, et al. Treatment approaches to rectus sheath hematoma. Ulus Travma Acil Cerrahi Derg 2007; 13: 55-9.
4. Hatjipetrou A, Anyfantakis D, Kastanakis M. Rectus sheath hematoma: a review of the literature. Int J Surg 2015; 13: 267.
5. Donaldson J, Knowles CH, Clark SK, et al. Rectus sheath haematoma associated with low molecular weight heparin: a case series. Ann R Coll Surg Engl 2007; 89: 309-12.
6. Snell Klinik Anatomi, 6. Edisyon, RS Snell. (Çev. Ed: Mehmet Yıldırım, Nobel Tıp Kitapevleri, 2004, İstanbul, sayfa 144).
7. Üzer, F., Özdemir, T. Antikoagülan tedavi ve rektus kılıf hematomu, Konuralp Tıp Dergisi 2020; 12: 61-65.
8. Fitzgerald JE, Fitzgerald LA, Anderson FE, et al. The changing nature of rectus sheath haematoma: case series and literature review. Int J Surg 2009;7:150-4
9. Alla VM, Karnam SM, Kaushik M, et al. Spontaneous rectus sheath hematoma. West J Emerg Med 2010;11:76-9.
10. Akıncı E, Gönen MÖ. Rectus sheath rupture and hematoma due to taking the shuttle. *Ankara Medical J* 2013;13(2):
11. Gölcük Y, Oray D, Bademkıran E. Type III rectus Sheath hematoma: A case report. *Tr J Emerg Med* 2012;12(1):38-40.
12. Cherry WB, Mueller PS. Rectus sheath hematoma: review of 126 cases at a single institution. *Medicine (Baltimore)* 2006;85:105-10.
13. Kaya C, Idiz UO, Yazıcı P, et al. Spontan rektus hematomlarda konservatif yaklaşım başarılı mı? Şişli Eftal Hastanesi Tıp Bülteni, 51, 2017; 71-75.
14. Erkuran MK, Duran A, Kaya M, et al. Karın ağrısı olgusu: rektus kılıf hematomu İKSST Dergisi, 8, 2016; 111-113.