



# A Case Report of Recurrent Acute Appendicitis

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## ÖZET

### *Bir olguda rekürren apandisit*

Güçük apandisit apendektominin çok nadir görülen gecikmiş bir komplikasyonudur ve ilk defa Rose tarafından 1945 yılında 2 vaka ile tanımlanmıştır. Bu çalışmada daha önce apendektomi olan bir hastada rekürren apandisit olgusundan bahsediyoruz. 21 yaşında bayan hasta 3 gündür olan karın ağrısı şikayeti ile acil servise başvurdu. Fizik muayenesinde sağ alt kadranda ağrı, defans ve rebound mevcuttu. Abdominal ultrasonografide inflame tübüler, komprese olmayan, peristaltizmi olmayan, kör sonlanan 1.5 cm uzunluğunda bir yapı görüldü. Hastaya güdük apendektomi yapıldı. Patoloji sonucu inflamatuvar değişiklikler geldi. Güdük apandisit çok nadir görülen ve sağ alt kadranda ağrılarında hatta sağ üst kadranda ağrılarında ayırıcı tanıda yer alması gereken bir patolojidir. Güvenli bir tanı ve tedavi için daha önce apendektomi hikayesi olanlar da dahil mutlaka ayırıcı da güdük apandisit yer almalıdır.

**Anahtar kelimeler:** Akut apandisit, güdük apandisit, güdük

## ABSTRACT

### *A case report of recurrent acute appendicitis*

Stump appendicitis is one of the rare delayed complications of appendectomy first described in 2 patients by Rose in 1945. In this study, we report a case of recurrent appendicitis after previous appendectomy. 21 year old female represented to emergency clinic with a 3 day history of abdominal pain. Her physical examination revealed right lower quadrant pain, defance and rebound at right lower quadrant. Her abdominal ultrasonography revealed an inflamed tubular, non compressible, non peristalting, blind ended, 1.5 cm in length structure at right lower quadrant. We performed stump appendectomy and the pathology revealed acute inflammatory changes. Stump appendicitis is a real entity and should be taken into considerations in the differential diagnosis of right lower quadrant abdominal pain, and even in patients with previous appendectomy or abdominal surgery with incidental appendectomy. High degree of suspicion can help to make a correct diagnosis and a safe treatment.

**Key words:** Acute appendicitis, recurrent appendicitis, stump

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## INTRODUCTION

Appendicitis is the most common cause of acute abdomen. With a general life time risk of 7-8%, the appendectomy accounts for one of the most common operations in general surgery (1). Postoperative complications after appendectomy include wound

infection, intra-abdominal abscess, retrocecal abscess, intestinal perforation with peritonitis, bleeding and adhesions (2). Stump appendicitis (SA) is one of the rare delayed complications of appendectomy first described in 2 patients by Rose in 1945 (3). Stump appendicitis is caused by infection of the residual portion of the appendix left in place. The clinical presentation of SA does not differ from that of acute appendicitis. Although unusual, it must be included in the differential diagnosis of right lower quadrant pain in patients who already underwent appendectomy (4). The incidence of stump appendicitis is about 1 in 50 000 cases even though the real incidence is probably higher due to underestimating of this entity

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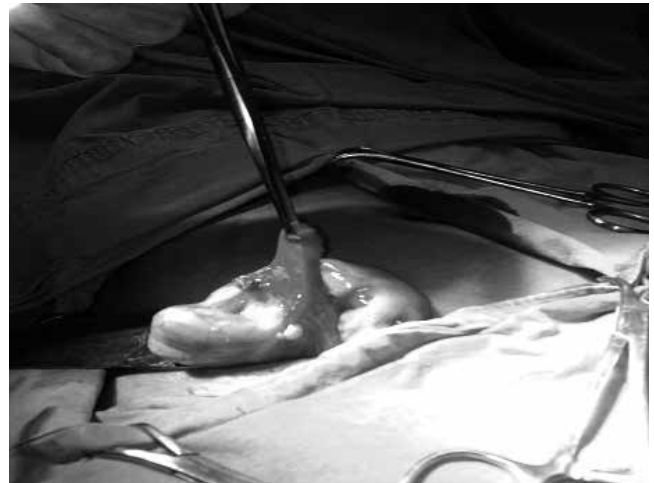
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**Figure 1:** Stump appendicitis



**Figure 2:** Stump appendicitis

(5,6). In this study, we report a case of recurrent appendicitis after previous appendectomy.

### **CASE REPORT**

We report the case of a 21 year old female who admitted to our emergency clinic with the onset of abdominal pain occurring for about 3 days. Her physical examination revealed right lower quadrant pain, defense and rebound at right lower quadrant. White blood cell count was 11000 cells/mm<sup>3</sup>. Urinalysis was normal. She had a history of previous appendectomy 4 years ago. Her abdominal ultrasonography showed that an inflamed tubular, non compressible, non peristalting, blind ended, 1.5 cm in length structure at right lower quadrant. Laparotomy revealed from the site of previous appendectomy incision scar, at the junction of terminal ileum and cecum, there was a 1.5 cm in length tubular, inflamed structure detected (Figure 1, 2). We performed stump appendectomy and the pathology revealed an acute inflammatory changes. The patient made an uneventfull recovery and was discharged home 2 days postoperatively.

### **DISCUSSION**

Stump appendicitis is the re-inflammation of the residual appendiceal tissue after an appendectomy that can occur after months to years after the original operation (7-9). Stump viscera caused by an incomplete operation can present the same symptoms as before the first operation. It represents a rare delayed complication

of appendectomy which is unknown by most clinicians (4,7-11). Its frequency is under-estimated and under-reported (4,10,11,12). It has been described predominantly in case reports.

Some factors have been suggested for the development of this condition. Inadequate visualization of the appendiceal-cecal junction can lead to longer stump length, a proposed risk factor for developing this condition (4,7-16). Our patient had a relatively long stump. Appropriate operative technique at appendectomy is required to minimize this risk. Clinically, patients present with signs and symptoms similar to appendicitis or acute abdomen (6). The presence of an appendectomy scar does not absolutely rule out the possibility of stump appendicitis. Symptoms may be minimal at initial presentation, but ultrasonography and CT are diagnostic modalities that can assist the physician in making the preoperative diagnosis. Physician should keep in mind a possible incomplete appendiceal resection to prevent delayed diagnosis and treatment. Treatment is based on complete removal of the appendix (8,12). Stump appendicitis is infrequently included in the differential diagnosis for recurrent abdominal pain following appendectomy, and diagnosis may be delayed.

In conclusion, stump appendicitis is a real entity and should be taken into considerations in the differential diagnosis of right lower quadrant abdominal pain, and even of right upper quadrant abdominal pain in spite of previous appendectomy or abdominal surgery with incidental appendectomy. High degree of suspicion can help to make a correct diagnosis and a safe treatment.

## REFERENCES

1. Hardin DM Jr. Acute appendicitis: review and update. *Am Fam Physician* 1999; 60: 2027-2034.
2. Nyhus LM, Baker RJ, Fischer JE (Eds). *Mastery of Surgery*. Little Brown; Boston 1997: p.1407-1411.
3. Rose TF. Recurrent appendiceal abscess. *Med J Aust* 1945; 32: 352-359.
4. Aschkenasy MT, Rybicki FJ. Acute appendicitis of the appendiceal stump. *J Emerg Med* 2005; 28: 41-43.
5. Mangi AA, Berger DL. Stump appendicitis. *Am Surg* 2000; 66: 739-741.
6. Watkins BP, Kothari SN, Landercasper J. Stump appendicitis: case report and review. *Surg Laprosc Endosc Percutan Tech* 2004; 14: 167-171.
7. Gupta R, Gernshiemer J, Golden J, Narra N, Haydock T. Abdominal pain secondary to stump appendicitis in a child. *J Emerg Med* 2000; 18: 431-433.
8. Waseem M, Devas G. A child with appendicitis after appendectomy. *J Emerg Med* 2008; 34: 59-61.
9. Erzurum VZ, Kasirajan K, Hashmi M. Stump appendicitis: a case report. *J Laparoendosc Adv Surg Tech A* 1997; 7: 389-391.
10. Uludag M, Isgor A, Basak M. Stump appendicitis is a rare delayed complication of appendectomy: A case report. *World J Gastroenterol* 2006; 12: 5401-5403.
11. Liang MK, Lo HG, Marks JL. Stump appendicitis: a comprehensive review of literature. *Am Surg* 2006; 72: 162-166.
12. Feigin E, Carmon M, Szold A, Seror D. Acute stump appendicitis. *Lancet* 1993; 341: 757.
13. Rao PM, Sagarin MJ, McCabe CJ. Stump appendicitis diagnosed preoperatively by computed tomography. *Am J Emerg Med* 1998; 16: 309-311.
14. Devereaux DA, McDermott JP, Caushaj PF. Recurrent appendicitis following laparoscopic appendectomy. *Dis Colon Rectum* 1994; 37: 719-720.
15. Shin LK, Halpern D, Weston SR, Meiner EM, Katz DS. Prospective CT diagnosis of stump appendicitis. *AJR* 2005; 184: S62-S64.
16. Marcoen S, Onghena T, Van Loon C, Vereecken L. Residual appendicitis following incomplete laparoscopic appendectomy. *Acta Chir Belg* 2003; 103: 517-518.