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Rectal Foreign Body Successfully Removed by Colonoscopic Snare Wire

Kolonoskopik Snare Teli ile Başarıyla Çıkartılan Rektal Yabancı Cisim

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Abstract

Aim: The most common cause of rectal foreign bodies are objects used for sexual stimulation voluntarily by the patient. Different treatment methods are reported in the literature, and this article reports the transanal removal of the foreign body in the rectum with a snare wire without anesthesia, accompanied by colonoscopy.

Case: An 80-year-old male patient was admitted to the emergency room because of the plastic rectal shower head that remained in the rectum and could not be removed while he was using a rectal douche for constipation. Contrast-enhanced abdominal computed tomograpyh (CT) showed a foreign body located in the rectosigmoid region without perforation findings. 12x1,5 cm tubular, well-circumscribed plastic foreign body embedded in the stool was removed with the help of colonoscopy in a controlled manner by holding it from its distal end with the help of endoscopic snare wire.

Conclusion: Rectal foreign bodies can often be removed by the patient. However, in cases of foreign bodies in the rectum admitted to the hospital, the treatment method varies according to the type and location of the object, the occurrence of the event, and whether there are perforation findings in physical examination and imaging. Digital rectal examination is the critical first step in evaluating a patient with a rectal foreign body. Bedside extraction as the first-line treatment for low-lying anorectal foreign bodies without signs of perforation; endoscopic extraction is recommended as the first step in anorectal foreign bodies located high above the rectosigmoid junction. Because in cases without perforation, transanal removal of the foreign body is considered the first-line treatment and the success rate is approximately 75 %. The most essential condition for successful transanal removal of the foreign body in the rectum is the relaxation of the patient. Endoscopic examination is also recommended to evaluate the condition of the intestinal wall after the removal of the foreign body. In our case, we also removed the foreign body, which we found to be located in the middle rectum, in accordance with the literature, endoscopically.

Keywords: Colonoscopy; rectum; foreign body

Öz

Amaç: Rektal yabancı cisimlerin en sık nedeni, hasta tarafından istemli olarak cinsel uyarım için kullanılan nesnelerdir. Literatürde farklı tedavi yöntemleri bildirilmiştir ve bu makalede rektumdaki yabancı cismin kolonoskopi eşliğinde anestezi uygulanmadan snare teli ile transanal olarak çıkarılması bildirilmektedir.

Olgu: Seksen yaşında erkek hasta, kabızlık için rektal duş kullanırken rektumda kalan ve çıkarılamayan plastik rektal duş başlığı nedeniyle acil servise başvurdu. Kontrastlı abdominal bilgisayarlı tomografide (BT) rektosigmoid bölgede perforasyon bulgusu olmayan bir yabancı cisim görüldü. Dışkı içine gömülü 12x1,5 cm boyutlarında tübüler, iyi sınırlı plastik yabancı cisim endoskopik snare teli yardımıyla distal ucundan tutularak kontrollü bir şekilde kolonoskopi yardımıyla çıkarıldı.

Sonuç: Rektal yabancı cisimler sıklıkla hasta tarafından çıkarılabilir ancak hastaneye başvuran rektumda yabancı cisim vakalarında tedavi yöntemi cismin cinsine, yerine, olayın oluş şekline, fizik muayene ve görüntülemede perforasyon bulgusu olup olmamasına göre değişir. Dijital rektal muayene rektal yabancı cismi olan bir hastanın değerlendirilmesinde kritik ilk adımdır. Perforasyon bulgusu olmayan distal yerleşimli anorektal yabancı cisimlerde ilk basamak tedavi olarak yatak başı ekstraksiyon; rektosigmoid bileşkenin üzerinde proksimal yerleşimli anorektal yabancı cisimlerde ise ilk basamak olarak endoskopik ekstraksiyon önerilmektedir. Çünkü perforasyon olmayan olgularda yabancı cismin transanal yolla çıkarılması ilk basamak tedavi olarak kabul edilir ve başarı oranı yaklaşık %75'tir. Rektumdaki yabancı cismin başarılı bir şekilde transanal olarak çıkarılması için en temel koşul hastanın rahat olmasıdır. Yabancı cismin çıkarılmasından sonra bağırsak duvarının durumunu değerlendirmek için endoskopik muayene de önerilmektedir. Biz de olgumuzda orta rektumda yerleştiğini tespit ettiğimiz yabancı cismi literatüre uygun olarak endoskopik olarak çıkardık.

Anahtar sözcükler: Kolonoskopi; rektum; yabancı cisim

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Introduction

Transanal rectal foreign body refers to the inability to remove a foreign body that was inserted transanally for any reason (1). Although the incidence of foreign bodies in the rectum are not known precisely, as it is not as common as foreign bodies in the upper gastrointestinal tract, the reported cases are increasing gradually (2). Rectal foreign bodies are mostly seen in men aged 20-40 years (3). It can be seen in the rectum for many reasons, such as sexual satisfaction, sexual assault, accidental origin, and hiding (4). However, the most common cause of rectal foreign bodies is objects used for sexual stimulation voluntarily by the patient. The second most common reason is the packages placed for transportation in drug traffic (5). A large number of rectal foreign bodies have been described in the literature, and the most common one is household items such as glasses and bottles, with a rate of 42.2% (2).

In rectal foreign bodies, the treatment approach changes due to the type and size of the object and the difference in the clinical picture caused by the object. This situation causes difficulties in the treatment of physicians. Different treatment methods are reported in the literature, and this article reports the transanal removal of the foreign body in the rectum with a snare wire without anesthesia, accompanied by colonoscopy.

Case

An 80-year-old male patient was admitted to the emergency room because of the plastic rectal shower head that remained in the rectum and could not be removed while he was using a rectal douche for constipation. It was learned from the patient's history that he had been using a rectal douche for a long time due to constipation. He stated that he applied a rectal douche six hours before he applied to the emergency department. His general condition was good, and his vital signs were normal. There were no signs of rebound or defense tenderness in his physical examination. The patient did not describe abdominal pain. There was stool contamination in the digital rectal examination, but no foreign body could be palpated. The anal sphincter tone was normal. The blood chemistry result was normal. In the plain abdominal X-ray taken in the emergency department, a well-circumscribed plastic foreign body was observed in the pelvic region, and no free air was observed. Contrast-enhanced abdominal CT showed a foreign body located in the rectosigmoid region without perforation findings (Figure 1).

The colonoscopic examination was considered without anesthesia since acute abdomen symptoms were not observed in the patient. A scope (EC-590WL4, Fujinon, Japan) was inserted transanally by placing the patient in the left lateral decubitus position. In colonoscopy, an approximately 10 cm tubular plastic structure covered with stool was observed at the rectosigmoid junction. Partial damage to the mucosa was observed in the area where it was located. No perforation and active bleeding were observed. 12x1.5 cm tubular, well-circumscribed plastic foreign body embedded in the stool was removed with the help of colonoscopy in a controlled manner by holding it from its distal end with the help of endoscopic snare wire (Figure 2). Subsequently, the mucosa from which the foreign body was removed by colonoscopy and the colonic segments up to the hepatic flexure reached by the foreign body were examined (Figure 3). The mucosa was observed intact. The patient was discharged with normal controls one day after the procedure.

Figure 1: Rectal foreign body on abdominal CT

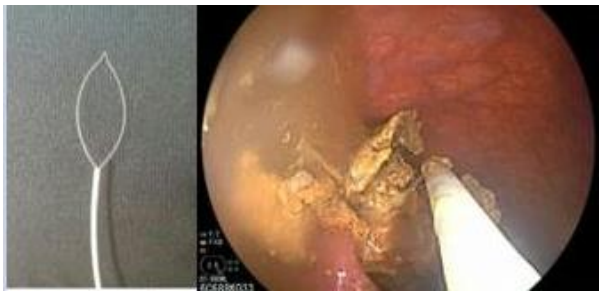

Figure 2: Snare wire to remove rectal foreign body colonoscopically

Figure 3: Rectal foreign body

Discussion

Rectal foreign bodies can often be removed by the patient. While endoscopic intervention is required in 20 % of cases, surgical intervention is required in only 1% (6). However, in cases of foreign bodies in the rectum admitted to the hospital, the treatment method varies according to the type and location of the object, the occurrence of the event, and whether there are perforation findings in physical examination and imaging. Typically, patients do not talk about the event in detail, delaying the treatment because they apply at the hospital late, and this sometimes causes serious complications (7). Therefore, before planning the treatment, a detailed history should be taken, and physical examination and x-ray and CT scans of the abdomen should be planned (2). Digital rectal

examination is the critical first step in evaluating a patient with a rectal foreign body (5). The patient's anal sphincter tone gives information about the location of the object. Generally, laboratory findings do not help in the diagnosis in patients with rectal foreign body. Radiological evaluation is more important. A standing plain abdominal X-ray provides information about the body and the presence or absence of pneumoperitoneum (5).

Bedside extraction as the first-line treatment for low-lying anorectal foreign bodies without signs of perforation; endoscopic extraction is recommended as the first step in anorectal foreign bodies located high above the rectosigmoid junction (8). Because in cases without perforation, transanal removal of the foreign body is considered the first-line treatment and the success rate is approximately 75 % (9).

The most essential condition for successful transanal removal of the foreign body in the rectum is the relaxation of the patient. For this, perianal nerve block can be provided with spinal anesthesia or accompanying intravenous conscious sedation (5). In addition, the patient's Valsalva maneuver may help the transanal outlet (2).

Endoscopic examination is also recommended to evaluate the condition of the intestinal wall after the removal of the foreign body (8). The aim is to evaluate the distal colon and rectal mucosa to determine whether there is active bleeding, the presence of an additional foreign body, and full-thickness injury to the rectal mucosa (5). In our case, we also removed the foreign body, which we found to be located in the middle rectum, in accordance with the literature, endoscopically. Because the patient was in the geriatric age group, sedation anesthesia was not applied. After the endoscopic removal procedure, the colonic mucosa up to the hepatic flexure was reviewed for the possibility of perforation, bleeding, and mucosal damage and no additional findings were found except minimal mucosal damage.

The most dangerous complication of the rectal foreign body is perforation. (5) Therefore, the first step in the evaluation and management of a patient with a rectal foreign body is to investigate the perforation. When perforation is suspected, the general condition of the patient should be evaluated (5). If the patient is stable, vital signs are normal, but perforation is suspected, CT is the first examination to be requested (5). Transanal extraction is not recommended in a patient with hemodynamic instability or perforation findings (8) In the presence of such a situation; the foreign body should be surgically removed (2).

Conclusion

As a result, since the treatment of a patient presenting with a foreign body in the rectum will vary from bedside extraction to major surgical interventions, the most important point in removing a rectal foreign body from a patient is to choose the least invasive and safest method for the patient. Surgery has a high risk of morbidity and mortality in some patients. Therefore, the colonoscopic examination should be considered the first choice for the removal of foreign bodies in the rectum, especially in elderly patients without perforation findings and with comorbid diseases, with the development and gaining importance of colonoscopic examinations in recent years.

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