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Anorectal Foreign Bodies

ORIGINAL INVESTIGATION

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ABSTRACT

Objective: Presence of foreign bodies in the rectum is an important reason for emergency surgery. In this study, the implementations in diagnosis and treatments of patients who apply foreign bodies in the rectum and their social statuses are presented with literature.

Materials and Methods: The cases diagnosed with a foreign body in the anus or rectum and treated in Akdeniz University Medical Faculty Hospital between the years 2000 and 2012 were retrospectively evaluated.

Results: Ten patients were included in this study. The mean age of patients was determined as 51 (17–70) years. While nine patients stated that they implemented foreign bodies in the rectum with the purpose of eroticism, jejunostomy for nutritional support led to the obstruction in a female patient, with inoperable gastric carcinoma diagnosis, after it entered the rectum through the upper gastrointestinal system. Six of the nine male patients who implemented a foreign body in the rectum with the purpose of eroticism were living alone. The foreign bodies were removed through anal dilatation in two patients, rectosigmoidoscopy in five patients, laparotomy in three patients (Stripping, colostomy, and Hartman colostomy procedure).

Conclusion: It can be considered that middle-aged males living alone tended to these perform actions because 60% of the cases in our study were living alone. Further studies are required for this hypothesis.

Keywords: Foreign body, anorectal trauma, rectum

INTRODUCTION

Foreign bodies in the rectum are important reasons for emergency surgery due to the related complications. These bodies can reach the rectum from the upper intestinal system through oral intake or can be pushed into the rectum through the anal route. Patients present to the hospital with the complaints such as abdominal pain, inability to defecate, tenesmus, and rectal bleeding. On first admission to the hospital, the signs of peritonitis can be found or no symptom can be observed. The diagnosis and treatment of foreign bodies in the rectum are difficult because of delayed application and variety of the objects and injuries. Due to the complications, it is vital to diagnose, treat, and follow up the patient with a serious approach.

MATERIALS and METHODS

The patients treated for a foreign body in the anus or rectum in the Medical Faculty Hospital of Akdeniz University between the years of 2000 and 2012 were evaluated retrospectively. The patients' ages, genders, medical information, imaging techniques, laboratory data, preoperative and postoperative endoscopy findings, treatment methods, and information on foreign bodies were reached from the hospital records. Plain abdominal radiography was performed for all patients. After the foreign body was removed, luminal damage was evaluated by endoscopic examination.

Statistical analysis

The data obtained were analyzed using SPSS software.

RESULTS

Ten patients admitted to the Medical Faculty Hospital of Akdeniz University due to anorectal foreign body between the years of 2000 and 2012 were included in the study. One of the patients was female and the mean age was 51 years (17–70 years). In their anamneses, 9 patients stated that they implemented the foreign body into the rectum for erotic purposes. On the other hand, in a 70-year-old female patient diagnosed with inoperable gastric carcinoma, her feeding jejunostomy extended from the upper gastrointestinal system to the rectum and caused obstruction. While this female patient complained of constipation associated with obstruction, 7 patients had hematochezia and anal pain and 2 patients had abdominal pain. Of the 9 male patients who implemented the foreign body into their rectum for erotic purposes, 6 lived alone. The foreign bodies removed were special-shaped wood stick, deodorant bottle, egg-

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plant (Figure 1), cucumber, raki glass, and special object for erotic purposes. The mean time of admission to the hospital was found to be 20 h (4–84 h). Physical examination revealed abdominal tenderness and rebound in 2 patients and distension in 1 patient. Abdominal examination results of other patients were normal. All patients underwent rectal examination in the emergency department and their ambulatory direct abdominal radiographies were taken. Right sub-diaphragmatic free air was detected in one patient. Abdominal computed tomography scan was not performed for any patient. All patients were exposed to antibiotic and tetanus.

In two patients in the emergency department, wood stick and eggplant were removed with anal dilatation. Rectosigmoidoscopy was performed under sedation for all patients except for the patient with perforation. While foreign bodies were removed in 5 patients, the procedure of removing through rectosigmoidoscopy was unsuccessful in two patients having deodorant bottle and feeding jejunostomy in their rectum. In the case with the deodorant bottle, the findings of abdominal examination were normal and we waited for spontaneous discharge for 24 h. Because spontaneous discharge did not occur, laparotomy was performed. The deodorant bottle was monitored in the rectosigmoid junction and removed from the anus by the stripping technique. In the patient with feeding jejunostomy, it was observed that the object caused obstruction in the rectosigmoid junction. Because the case was unsuitable for the stripping technique, the jejunostomy tube was removed by performing incision in the sigmoid colon on the transverse plane and the colon was closed after primary repair. The patient underwent laparotomy after examining the perforation. The wood stick extending extraluminally was observed by causing perforation in the rectosigmoid junction. In the abdomen of this patient who had waited for 8 h, the object contacted with the stools. Following the removal of the object, Hartman colostomy procedure was implemented.

Control flexible rectosigmoidoscopy and plane radiography were conducted after 24 h for all patients except the ones having undergone colotomy and colostomy procedure, for whom these examinations were performed on the fourth day. Hemorrhage or laceration was not detected in the anus, rectum, and sigmoid colon mucosa.

All patients were discharged from the hospital after control rectosigmoidoscopy. No mortality was observed in any patient.

DISCUSSION

Foreign bodies in the rectum are important emergency surgery reasons due to the related complications. These objects can reach the rectum from the upper intestinal system, oral intake, or can be pushed into the rectum through the anal route. Of them, hard objects such as dental prosthesis, toothpick, and fishbone, which are taken orally pass the ileocecal valve and are excreted through the anal channel at the rate of 90% (1). Sometimes, these hard objects can cause perianal fistula, abscess, or fissure due to contact with anorectum (2). Foreign bodies stuck in the rectum after being administered orally are mostly seen in people with low intellectual level, those who are mentally handicapped or old, and in thieves and smugglers. On the other hand, foreign bodies pushed through the anus are often used as sex objects by middle-advanced aged homosexual men (1, 3). Of our patients, 90% (9 patients) were male and rectal foreign bodies were used for autoeroticism. Different from literature, it was remarkable that our 6 patients (60%) were living alone. It can be thought that middle-advanced aged males living alone may have a tendency to perform these kind of actions and further studies are needed for confirming this thought.

Figure 1. Eggplant removed from the rectum

Patients do not present to a hospital at the beginning due to shame and guilt; others give wrong and incomplete information in their medical histories. The use of another instrument for removing the foreign body increases the risk for perforation and laceration and also causes the foreign body to be pushed farther. Patients go to the hospital with complaints such as abdominal pain, inability to defecate, tenesmus, and rectal bleeding. On first admission to the hospital, the signs of peritonitis can be present or no symptom can be found. Serious complications including anal sphincter damage, anal bleeding, perforation, peritonitis, pelvic abscess, or sepsis can develop due to all these reasons (4).

Detailed anamnesis, a complete physical examination, carefully performed proctoscopy and bilateral radiographies including the abdomen and pelvis are important for diagnosis. The statement by the patient is significant for accurate and rapid diagnosis. Although patients reflect the story differently most of the time, they tell the truth about the type of foreign body. Physical examination clarifies the situation while diagnosing. Over-hyperemia or ecchymoses having occurred at different time points provides information about the chronicity of the event. Blood observed when touching can be an indicator of laceration or perforation (3, 4). If the object can be reached when touching, a general idea can be obtained about the type, shape, and level of the object. Prophylactic antibiotic therapy,

tetanus prophylaxis, and control for genitourinary trauma are recommended for the patients (5, 6).

In patients with anorectal symptoms or suspected anamnesis, abdominal bilateral direct radiographies should be performed. Examination with an anoscope is important for the objects not monitorized in this way. Computed tomography is essential for imaging perforation or pelvic abscess in patients having severe abdominal pain (7, 8).

If the presence of a foreign body in the anorectum is confirmed, the first thing to do is to try to remove it through the anal route. This can be difficult because of the anatomical structure of the anorectum, sacral curvature, and anal sphincter spasm. Enema is not recommended because it can cause the foreign body to be stuck deeper and one would have to go further leading to edema in the wall of the rectum. If adequate sphincter relaxation and dilatation cannot be obtained with appropriate anesthesia to remove the foreign body, closed lateral internal sphincterotomy can be attempted (9). After the procedure, the rectum must definitely be evaluated with rectosigmoidoscopy. Bleeding associated with mucosal lacerations can occur in the rectum. If the foreign body is removed early through the transanal route, mucosal lacerations generally do not require treatment. For identifying the complications after monitoring, patients should be kept under observation for at least 12–24 h (5). Endoscopy, catheter, or balloon can also be used for removing objects stuck at a stable position in the anorectum through the anal channel (10, 11). In our study, foreign bodies were removed with anal dilatation in 2 patients in the emergency department. All patients except the one with perforation underwent rectosigmoidoscopy under sedation, but the foreign bodies could be removed through rectosigmoidoscopy in 5 patients.

Laparotomy may be needed when the procedure of removing the target object from the anus fails or complications such as pelvic abscess and perforation develop. In the absence of perforation, the procedure of stripping toward the anus should be attempted first. While performing this procedure, one should be careful for possible injuries in the rectum and anal channel. If this procedure also fails or cannot be performed, the foreign object can be removed by performing incision in the colon or rectum. In patients with perforation, primary repair can be implemented if peritoneal contamination is not observed and the perforation is small and smooth-marginated. Sigmoid colostomy or Hartman surgery procedure can be needed if complications such as pelvic abscess, diffuse stools, and contamination have developed or damaged colon has been repaired or resected. On the other hand, primary repair is generally performed for anal sphincter injuries that occur in association with the foreign body in the rectum (7, 8). In our study, the deodorant bottle, which could not be removed by rectosigmoidoscopy, did not discharge spontaneously after waiting for 24 h; thus, laparotomy was performed and the bottle was removed by the stripping technique. In the patient having feeding jejunostomy, we found obstructions. Therefore, she underwent laparotomy and it was observed that jejunostomy caused obstruction in the rectosigmoid junction. Because her condition was unsuitable for the stripping technique, the jejunostomy tube was removed by performing incision in the sigmoid colon on transverse plane and the colon was closed following primary repair. In the patient having perforation, the wood stick was removed through laparotomy and Hartman colostomy procedure was implemented.

After the anorectal foreign bodies are removed, close monitoring is necessary for anal functions and possible complications. Rectosigmoidoscopy is useful for determining the presence and extent of mucosal injury. If any damage is suspected in the internal anal sphincter, anal function tests and anal ultrasonography must be performed (7, 8).

CONCLUSION

Foreign bodies in the rectum are important emergency surgery reasons due to the related complications. Because of these complications, it is vital to diagnose, treat, and follow-up the patient seriously. Since 60% of the patients in our study had a history of living alone, it can be thought that middle-advanced aged males living alone may have a tendency to engage in these type of actions. However, more studies are needed to confirm this hypothesis. Psychiatric evaluation is important for the treatment of patients with a possibility of the risk of recurrence.

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Informed Consent: Written informed consent was not obtained from patients due to the retrospective nature of this study.

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