Fecalomas as a rare cause of ileus

Abstract

Fecalomas are one of the rare causes of ileus and they occur as a result of the accumulation of stagnating stool in the intestine and forming a mass. It can be observed at any age. It often accompanies pathologies that cause chronic constipation and impaired mobility. Fecalomas are most commonly observed in the rectum and sigmoid colon. Fecaloma is a rare complication of chronic constipation, and apart from constipation, symptoms may be vague. Fecaloma can cause acute intestinal obstruction and may present with ileus signs and symptoms. Diagnosis is made by direct radiographs, barium enema or abdominal CT. In its treatment, noninvasive management should be applied first. If conservative treatments fail, endoscopic removal may be attempted. Surgical intervention is necessary when conservative and endoscopic intervention fail. After the fecaloma is treated, its recurrence should be prevented with a high fiber diet and appropriate toilet habits.

Introduction

Fecalomas are one of the rare causes of ileus and they occur as a result of the accumulation of stagnating stool in the intestine and forming a mass. They often cannot be expelled spontaneously. Although most of the reported cases are adults, there are cases reported in the pediatric age and even infancy [1-4]. Fecalomas often accompany pathologies that cause chronic constipation and motolite disturbance, such as Hirschsprung’s disease, Chagas disease, scleroderma, intestinal tuberculosis, inflammatory or tumoral pathologies of the intestine. It can also be observed in psychiatric patients who swallow different substances [1-7]. It has been reported that intestinal edema or obstruction due to gastrointestinal food allergies may lead to the formation of fecaloma [1,2]. Cases of cerebral palsy, diabetic nephropathy, and fecaloma have also been reported in patients receiving anti-psychotic therapy [8-10]. Very rarely, it can occur without a predisposing factor.

Fecalomas are most frequently observed (90%) in the rectum and sigmoid colon because the diameter of the colon is narrower and the stool here is more solid [1,2,4,5]. Rarely, cases of fecaloma in the cecum and small intestine have been reported [4].

In fecaloma, the composition of the mass is highly variable, but it usually occurs when fecal matter and intestinal remnants accumulate in layers and become a hard mass [3,7,9].

Clinical image

Fecaloma is a rare complication of chronic constipation, and symptoms other than constipation may be vague [3,9,11]. Symptoms are usually nonspecific. Apart from chronic constipation, overflow type diarrhea, weight loss and vague abdominal discomfort after meals can be observed [4,8,12]. A mass may be palpated in the abdomen and urinary retention due to fecaloma compression may be observed [5].

The most important complication of fecaloma is intestinal obstruction and patients may present with signs and symptoms of acute intestinal obstruction [5]. If obstruction develops in a patient with chronic constipation, fecaloma should be considered in the differential diagnosis [4]. In addition, complications such as intestinal perforation, ulceration of the intestinal wall, urinary obstruction, secondary hydronephrosis, deep vein thrombosis and toxic megacolon have been reported [1-5,7].

When ileus develops in geriatric and bedridden patients, obstruction due to fecaloma should be kept in mind [3].
Diagnosis

A detailed history and direct abdominal film aids in the diagnosis of fecaloma [9].

Definitive diagnosis is made with barium enema or abdominal CT [4]. Fecalomas are observed as masses with smooth margins in the lumen. The mass is not adherent to the mucosal surface and moves within the intestinal lumen [4,8].

Treatment

In the treatment of fecalomas, noninvasive management should be applied first [1]. Most fecalomas are successfully treated with conservative methods such as hydration, bowel rest, laxatives, oral laxatives, enemas, manual rectal evacuation, and colonic lavage [1,3-5,9]. If conservative treatments fail, endoscopic removal may be attempted. Surgical intervention is required when conservative and endoscopic interventions fail or in areas that cannot be reached by endoscopy [2,4,5]. Excellent results have been reported with enterotomy and removal of the fecaloma [1,5].

Especially, fecalomas in the rectosigmoid region are treated with success conservatively, but in the presence of fecaloma in the proximal colon or small intestine, endoscopic disimpaction or surgical intervention is required more [2].

Fecalomas are repeatedly removed with biopsy forceps by gradual fragmentation [2,5] Case reports of fecalomas that were successfully resolved with endoscopic procedures have been reported in the literature [2,7,13]. Endoscopic fecaloma disimpaction methods with jumbo forceps and arm injection have also been reported [2,14,15].

It may be necessary to prioritize surgery in cases of intestinal obstruction, ulceration, and rectosigmoid megacolon [3]. When perforation develops, urgent laparotomy is required [2].

Prevention

After successful treatment of a fecaloma patient, recurrence should be prevented with a high-fiber diet, adequate water intake, increased fruit and vegetable consumption, and appropriate toilet habits [8].

References