

A CASE OF SIGMOID COLON CANCER PROLAPSE AS A RARE CAUSE OF ADULT ISCHEMIC INTUSSUSCEPTION

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Intussusception in adults is present with nonspecific symptoms, which can present diagnosis challenges. Herein, we describe a case with extremely painful sensitivity in anal prolapse of soft-tissue mass with hematoma, as well as signs of ischemia. An operation was performed, during which a large sigmoid intussusception with a 7-cm ulcerative tumor, being the leading point, was found. While the prolapsed intussusception per anus is most commonly associated with the rectum, the possibility of a sigmoid colonic prolapse should always be considered. In adults, intussusception of the large intestine is very often associated with colon cancer, and for this reason, it is necessary to undergo a surgical procedure in such patients.

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Key words: *diagnosis, intussusception, sigmoid prolapse, treatment*

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Introduction

Intussusception occurs most often in children, and this condition is very rare in adults. Bowel obstruction caused by intussusception occurs in 1% to 5% of cases (1). The prolapse of an intussuscepted "lead point", such as lipoma or tumor, is rare. Intussusception of the sigmoid colon, which clinically mimics prolapse of the rectum, occurs very rarely in adults (2). We present a complete prolapse of the rectum and sigmoid colon caused by adenocarcinoma located on the sigmoid colon.

Case presentation

A thirty-three-year-old female patient was admitted as an emergency with anal prolapse after defecation. The patient complained of severe pain in the anal area and the presence of dark red blood that came out of atypical 20 × 7 × 5 cm

prolapsing soft tissue mass. Clinical examination showed extremely painful sensitivity in prolapse of soft tissue mass with hematoma and signs of ischemia. (Figure 1). Opioid analgesics were used for pain treatment. The patient was clinically stable on admission (temperature 37.1 °C, heart rate 92 bpm, blood pressure 140/85 mm Hg). A physical examination showed that her abdomen was soft with tenderness at the lower part of the abdomen, with no rebound tenderness. The patient was treated by general practitioners for several years with the diagnosis of bleeding hemorrhoids. The colonoscopy was never performed. Further, the patient had laboratory signs of sideropian anemia. An examination under anesthesia was performed, during which the ulcerative tumor was verified on the prolapsing soft tissue mass. The mass was reduced successfully.

The patient underwent emergency surgical intervention when part of the sigmoid colon was verified with hematomas and ischemia (Figure 2). Hartmann's procedure was performed due to dilated and unprepared colon. After the surgery, a resected sigmoid colon was opened, when the 7-cm ulcerative tumor was verified (Figure 3). The patient had an uneventful postoperative course. The final diagnosis was of the sigmoid colon adenocarcinoma causing intussusception and the tumor prolapsed out through the anus.



Figure 1. The prolapsed sigmoid colon portion from the anus

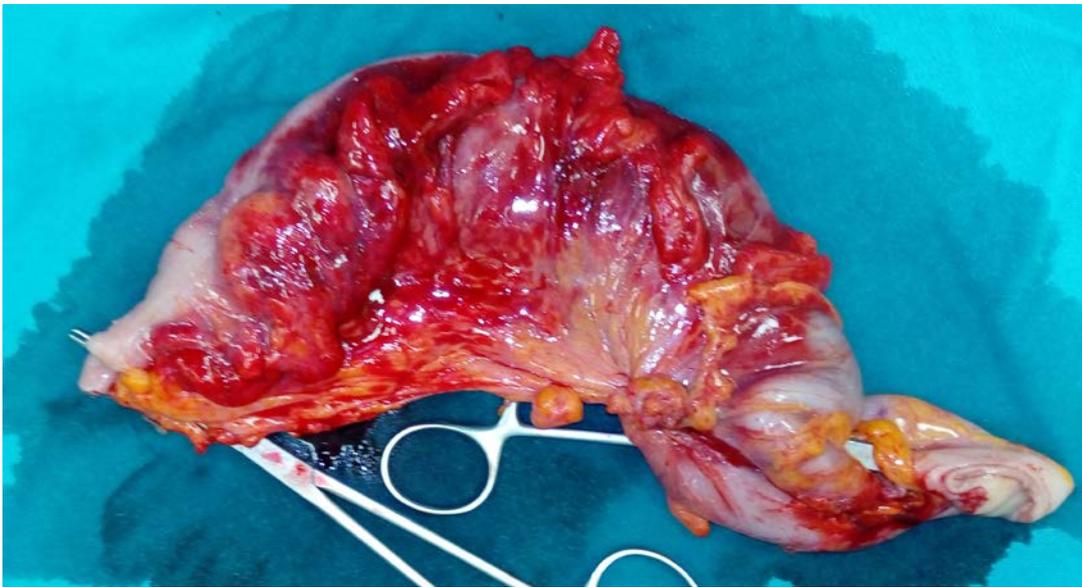


Figure 2. Sigmoid colon with the presence of haematomas and ischemia



Figure 3. Resected sigmoid colon with ulcerative tumor

Discussion

Clinical manifestation of intussusception in the adult population is very rare. Ileus caused by intussusception occurs in about 1% of cases, and the cause is hospitalization in about 1% of patients (3). The clinical triad of symptoms: abdominal pain, mass and per rectal bleeding is characteristic of the children's population, while adult patients do not necessarily have all these symptoms. A study by Wang et al. (4) showed that this triad of clinical symptoms can be found in

9.8% of adult patients. It is necessary to point out that, in children, in about 70% of cases intussusceptions are idiopathic. However, in adults, the most frequent cause of intussusception is tumor. A malignant tumor is the most common cause of anal prolapse of the colon (5).

Prolapse of the rectum caused by a malignant tumor is very rare, and so far it has been described in the literature only in a few papers (2). Prolapse of the sigmoid colon is an

even rarer entity (6, 7). It is very important to point out that when performing a clinical examination we should, if possible, verify a lead point lesion on the protruding mass because this cannot be verified when rectal prolapse occurs (8). This situation was also present in our patient, where there was a 7 cm ulcerative tumor serving as an intussusceptum at the sigmoid colon, leading to prolapse through the anus. Prolapsing intussusception has a very non-specific clinical picture, and it is very easy to make a mistake in establishing a diagnosis and suspect rectal prolapse. This is a characteristic of the initial stage of the disease when the symptoms of sigmoid colon obstruction are not fully displayed. For this reason, exercising caution in setting the correct diagnosis is of critical importance, especially given that such a condition can stand pre-malignant or malignant sigmoid colon lesion(s). In this specific case, the additional problem was caused by the venous blood stasis with very pronounced hematomas and ischemia, which additionally made intussusceptum particularly challenging to diagnose. Symptoms of ischemia require a rapid response by the surgeon. Based on the literary data, the initial recommended therapeutic measure is the reduction, unless there is a doubt of malignancy (9). Studies have shown that 60% of colonic intussusceptions are caused by malignant tumors (5, 9). For this reason, the use of preoperative colonoscopy or colonoscopy during surgery is recommended to avoid unnecessary resections of the colon and rectum in the case of the presence of benign lesions (10).

In our patient, the Hartmann procedure was performed, because the colon was not prepared, and there was marked dilatation and swelling of the colon. An anastomosis was not performed in the patient for the aforementioned reasons, in

order to avoid a high risk for dehiscence of the anastomosis. The clinical practice of our hospital is to give priority to staged surgery in patients with obstructive carcinoma of the left colon.

In establishing the diagnosis of intussusception, the use of colonoscopy and MSCT of the abdomen and pelvis has a very important role. Colonoscopy, as a diagnostic procedure, should clarify the cause of intussusception and provide a histological sample of the tumor. In this way, further treatment will be planned. Intussusception can be most accurately diagnosed with the help of MSCT of the abdomen and pelvis. With the help of this diagnostic method, the place of intussusception, extent, basic lesion, dilatation of the intestine and signs of obstruction can be determined. It should be emphasized that MSCT is a noninvasive diagnostic method (8). Unfortunately, in this case, MSCT of the abdomen and pelvis was not performed for technical reasons, which ultimately did not affect the course and outcome of the treatment, although the authors consider that this diagnostic procedure should have a primary role in an adequate diagnosis setting. After the tumor visualization in general anesthesia, the colonoscopy did not make sense, as it would have postponed urgent surgical intervention and exacerbated the sigmoid colonic ischemia.

In conclusion, the prolapsed intussusception per anus is most commonly associated with the rectum, but the possibility of a sigmoid colonic prolapse should always be considered. If the diagnosis of intussusception of the colon in adults is made and it is caused by a malignant tumor, it is necessary to perform a surgical intervention to obtain an adequate diagnosis and provide adequate treatment.

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Prikaz bolesnika

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SLUČAJ PROLAPSA KARCINOMA SIGMOIDNOG KOLONA KAO REDAK UZROK ISHEMIJSKE INTUSUSCEPCIJE KOD ODRASLIH

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Intususcepcija je kod odraslih prisutna sa nespecifičnim simptomima, te može biti veoma izazovna kada je reč o postavljanju dijagnoze. Opisan je slučaj izrazito bolnog analnog prolapsa mekotkivne mase sa hematomom i znacima ishemije. Urađena je operacija i pritom je pronađena velika sigmoidna intususcepcija sa ulceroznim tumorom na 7 cm od anokutane linije. Prolbirana intususcepcija kroz anus najčešće je rektalnog porekla, mada uvek treba uzeti u obzir mogućnost prolapsa i sigmoidnog kolona. Intususcepcija debelog creva je kod odraslih često povezana sa malignitetom debelog creva, pa zahteva laparotomiju za dijagnozu i terapiju.

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Ključne reči: dijagnoza, intususcepcija, sigmoidni prolaps, lečenje

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