Adult Intussusception

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ABSTRACT

Adult intussusception is rare. We report the case of an elderly female patient with an ileocecal intussusception who underwent resection and ileocolic anastomosis. The histology revealed chronic inflammation of the ileum and cecum and there was no evidence of malignancy. There was no evidence of malignancy. The appendix showed fibrous obliteration of the lumen.

Key words: Elderly, intestinal obstruction, intussusception

INTRODUCTION

Intussusception is a rare cause of intestinal obstruction in adults. The diagnosis of intussusception is usually delayed because of its nonspecific presentation.[1] Nevertheless, intussusception is an important differential diagnosis because it is mainly due to a pathological mass lesion.[2] Surgical treatment is the main choice of the treatment compared to the pediatric population, where clear signs and symptoms are presented and therefore, the condition can be mainly managed by nonoperative procedures.[3]

CASE REPORT

A 74-year-old female was admitted to King Faisal Hospital in Makkah as a result of severe abdominal pain and vomiting of for 3 days and constipation of 1-day duration. The pain had started gradually in the right hypochondrium, which was localized, colicky in nature and progressive with no aggravating or relieving factors. The patient was able to pass flatus, afebrile and had no urinary symptoms. Nothing of significance in the patient’s history was reported, apart from hypertension.

Upon physical examination, the patient looked dehydrated, blood pressure was 105/70, other vital signs were in the normal range. She had slight abdominal distention with diffuse abdominal tenderness, no audible bowel sounds. The rectal examination revealed an empty rectum with no evidence of melena or fresh blood. The rest of the physical examination was unremarkable.
The patient’s laboratory results showed leukocytosis (14.6 × 10⁹/L), other laboratory work was normal including hemoglobin and chemistry. Arterial blood gas analysis was normal and her chest x-ray was unremarkable. Abdominal plain film showed typical picture of a small bowel obstruction: Distended small bowel loops in the supine position and air fluid level in the mid-abdomen in the erect position.

A clinical diagnosis of small bowel obstruction was made and the patient was started on conservative treatment (nasogastric tube suction, intravenous fluid rehydration and monitoring). Symptoms and signs improved, but on the 3rd day post-admission, she started passing red-brownish jelly and smelly stools. A CT of the abdomen was done, which showed an appendix mass and accumulation of fluid in the pelvis without signs of obstruction. On the 4th day of admission, the patient relapsed and reported that her pain had increased. A decision was made to proceed with an emergency laparotomy. Through a midline incision, an ileocecal intussusception was found with viable bowel and a cecal mass as the lead point. Three liters of fluid had accumulated in the pelvis. Resection and end-to-end ileocolic anastomosis were undertaken. The patient made an uneventful recovery. The histology revealed chronic inflammation of the ileum and cecum with no evidence of malignancy. The appendix showed fibrous obliteration of the lumen.

**DISCUSSION**

Intussusception is defined as telescoping of part of the intestine into another part causing obstruction, inflammation and ischemia which may lead to necrosis. It is a major and common cause of abdominal pain and obstruction in the pediatric population. However, in the adult population, it only represents 1–5% of all causes of obstruction. The most common place for an intussusception to occur is between a freely moving segment and an adhesionaly fixed segment. There are different types of intussusception depending on the anatomic site. For example, enterointeretic occurs in the small bowel, colocolic occurs only in the large bowel, ileocolic occurs in the terminal ileum and ascending colon and finally, ileocolic which occurs in the ileum and cecal valve. The etiology of intussusception in children is mainly idiopathic, but in adults just 8–20% of cases are considered as a primary or idiopathic; secondary intussusception is believed to occur because of pathological lesions that serve as a lead point such as carcinomas, polyps, Meckel’s diverticulum and strictures. The diagnosis of intussusception in adults is quite challenging with only 40–50% diagnosed preoperatively. The x-ray findings are limited to air fluid level and dilated loops. Ultrasound is considered a useful tool in adults and children. A CT scan is considered to be the best for diagnosis in the majority of cases (58–100%). Most intussusceptions that occur in adults require operative intervention (resection and anastomosis) because of the high incidence of pathological lesions and malignancy.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

**REFERENCES**

1. Marinis A, Yiallourou A, Samanides L, Dafnios N, Anastasopoulos G, Vassiliou I, et al. Intussusception of the bowel in adults: A review. World J Gastroenterol 2009;15:407-11.
2. Weilbaecher D, Bolin JA, Hearn D, Ogden W 2nd. Intussusception in adults. Review of 160 cases. Am J Surg 1971;121:531-5.
3. Begos DG, Sandor A, Modlin IM. The diagnosis and management of adult intussusception. Am J Surg 1997;173:88-94.
4. Azar T, Berger DL. Adult intussusception. Ann Surg 1997;226:134-8.
5. Cotlar AM, Cohn J Jr. Intussusception in adults. Am J Surg 1961;101:114-20.
6. Nagorney DM, Sarr MG, McIlrath DC. Surgical management of intussusception in the adult. Ann Surg 1981;193:230-6.
7. Reijnen HA, Joosten HJ, de Boer HH. Diagnosis and treatment of adult intussusception. Am J Surg 1989;158:25-8.
8. Eisen LK, Cunningham JD, Aufses AH Jr. Intussusception in adults: Institutional review. J Am Coll Surg 1999;188:390-5.
9. Boyle MJ, Arkell LJ, Williams JT. Ultrasonic diagnosis of adult intussusception. Am J Gastroenterol 1995;88:617-8.