

Case Report

Adenomyoma As A Lead Point For Jejunal Intussusception In An Adult: A Rare Case

Rajiv Nakarmi, Muza Shrestha, Sundar Maharjan, Deliya Paudel, Himanshu Regmi

Abstract

Adenomyoma of small intestine causing intussusception in adults is a rare condition. The small intestine is the second most frequent location, usually in the periampullary area, but the lesion also occurs in the jejunum and ileum. We present a case of 76 years old female who presented with pain abdomen and was diagnosed to have jejunal intussusception. She underwent surgery with segmental resection and anastomosis of jejunum and the histopathological examination revealed jejunal adenomyoma as the pathological lead point. Adenomyoma of jejunum as a lead point should be taken into consideration while dealing with a patient with jejunal intussusception.

Keywords: Adenomyoma; Intussusception; Small bowel..

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Introduction

Intussusception is defined as telescoping of proximal part of the bowel into a more distal part, which occurs commonly in infants and children between 3 months and 4 years of age.¹ Typical symptoms in these patients include a triad of acute abdominal pain, vomiting and bloody stools; however, patients may present with variable, non-specific symptoms.¹ Bowel intussusception in adults is considered a rare condition, accounting for 5% of all cases of intussusceptions and almost 1%-5% of bowel obstruction. The overall incidence of intussusception in adults is around 2–3 cases per 1,000,000 of the general population annually.² Eight to twenty percent of cases are idiopathic, without a lead point lesion. Secondary intussusception is caused by organic lesions, such as inflammatory bowel disease, postoperative adhesions, Meckel's diverticulum, benign and malignant

lesions, metastatic neoplasms or even iatrogenically, due to the presence of intestinal tubes, jejunostomy feeding tubes or after gastric surgery.³ Adenomyoma of small intestine causing intussusception is a rare entity. Adenomyoma of the gastrointestinal tract is a rare benign tumor-like lesion. The small intestine is the second most frequent location, usually in the periampullary area, but the lesion also occurs in the jejunum and ileum. While adenomyoma of the Vateria system is primarily diagnosed in adults, more than half of reported cases of jejunal and ileal adenomyoma have been diagnosed in pediatric patients.⁴ Adenomyoma of the periampullary area usually presents with biliary obstruction or abdominal pain, whereas jejunal and ileal adenomyoma usually presents with intussusception or is incidentally discovered during surgery or autopsy.⁴ About 10% of small bowel intussusceptions in adults are idiopathic.⁵

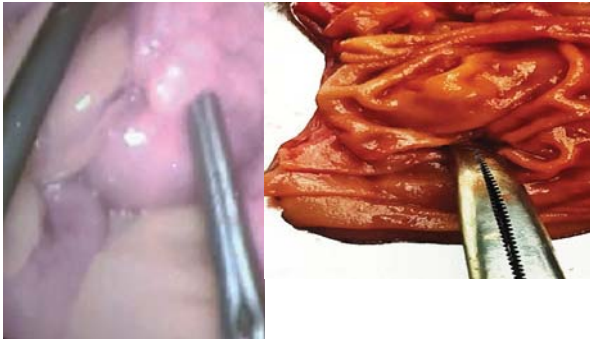


Figure 1. Intraoperative finding of jejunal lesion after reduction of intussusception

Case Report

A 76 years female presented to emergency with severe acute onset colicky pain in peri-umbilical region since the morning. She was having similar episodes of pain for the last few days but the pain was severe from the morning. She had a few episodes of vomiting which was projectile, bile stained, voluminous, and non-foul smelling. There is no history of fever, constipation/ diarrhea, passage of black stool abdominal distention.

Clinical examination showed she was well oriented to time, place and person with mild abdominal discomfort with knees flexed to the chest. Vitals were within normal limit. Abdominal examination showed mild tenderness over periumbilical region on deep palpation. However the abdomen was soft, with normal bowel sounds. Ultrasound showed small bowel intussusception which was further backed up by contrast enhanced computed tomography which revealed proximal jejunal intussusception with perilesional fat stranding.

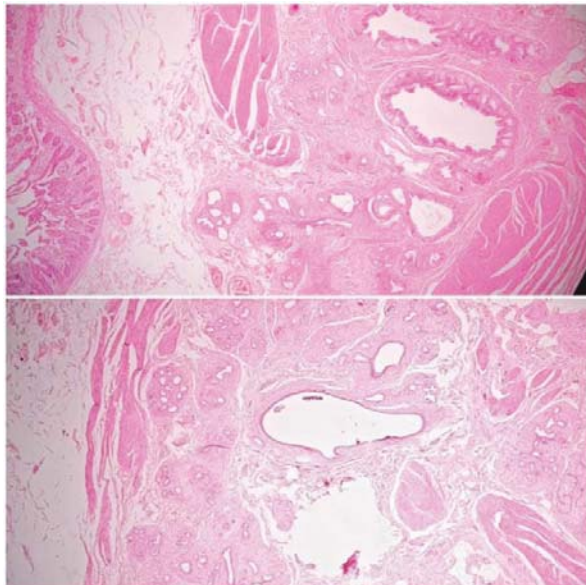


Figure 2. Shows interlacing smooth muscle bundles surrounding the glandular elements occupying submucosa extending to serosa.

Patient was taken up for diagnostic laparoscopy. Intraoperative findings were jejunal intussusception with submucosal lesion measuring about 2x2 centimeters at around 10cm distal to the duodeno-jejunal flexure (**Figure 1**) Segmental resection with end to end anastomosis was done. Postoperative recovery was uneventful and patient was discharged on 7th post-operative day. Histopathology revealed the lesion as adenomyoma of jejunum. (**Figure 2**).

Discussion

Adult intussusceptions represent 5% of all intussusception cases and account for only 1–5% of obstructions in adults.⁶ The prevalence is equal between adult genders.⁷ In adults, intussusception is usually accompanied with intermittent abdominal pain, nausea, vomiting, constipation, melena, weight loss, and fever. Abdominal pain is considered to be the most common symptom, presenting in about 70% of cases.⁸ In this case also the presenting symptom was abdominal pain and nausea. There are multiple radiographic tools that can aid the surgeon in the diagnosis of intussusception. These include plain abdominal films, ultrasound and CT scans of the abdomen. A plain abdominal film may show the typical features of distal small bowel obstruction. Ultrasound may show a Bull's eye sign of the involved segment of bowel.⁹ CT scan is the most useful diagnostic tool with a diagnostic yield of around 78%, and it also helps in identifying the underlying cause.¹⁰ A “target sign” may be seen on the sagittal view of the abdominal CT. The distended loop of bowel appears thickened, representing two layers of bowel.⁷ In addition, abdominal CT can be helpful in identifying the lead point in intussusceptions, if present. Treatment is almost always surgical in adults with pathological intussusception, where resection and primary anastomosis of the involved segment of bowel is performed. Segmental resection with end-to-end anastomosis was performed in this case. Almost 90% of adult intussusceptions are secondary to a pathological condition that serves as a lead point such as carcinoma, polyps, Meckel's diverticulum, colonic diverticulum, strictures, or benign neoplasm.³ Approximately in 13-47% of cases the cause is malignancy. Adenomyoma of jejunum was the pathological lead point in our case.

Conclusion

Adenomyoma of jejunum is a rare cause of small bowel intussusception in adult. Besides various pathological lead points it should also be considered while dealing with adult intussusception.

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