

Jejunal intussusception causing abdominal pain in adults: A case report and review of literature

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Abstract : Intussusception occurring in adults is an uncommon entity unlike pediatric population and is usually due to an underlying mechanical cause. Malignancy is the most common identified etiology in adult intussusception. Jejunal intussusception secondary to benign cause is a very rare phenomenon. We present a case of jejunal intussusception in an elderly male postoperatively diagnosed to be due to jejunal lipoma. A high index of clinical suspicion of such condition supported by computed tomography can help in preoperative diagnosis of such cases as most cases of jejunal lipomas are incidentally diagnosed during laparotomy.

Keywords – jejunal intussusception, jejunal lipoma

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I. Introduction

Intussusception is defined as the telescoping of a segment of the gastrointestinal tract into an adjacent one. It is a relatively common etiology of abdominal pain in pediatric population and is usually idiopathic. In adults, on the other hand, this entity is rather uncommon. It is estimated that only 5% of all intussusceptions occur in adults and approximately 5% of all bowel obstructions in adults are a result of intussusception. ^[1] This is a description of a rare case of an elderly male who presented to our hospital with abdominal pain and was diagnosed with jejunal intussusception secondary to intramural lipoma.

II. Case Report

A 60 year old male with no prior medical illness presented to the emergency department with acute periumbilical abdominal pain since 7 days. It was moderately severe, colicky in character, intermittent, radiating from the right hypochondrium to the left and was not associated with food intake. The pain was preceded by nausea and vomiting but there was no history of hematemesis or melena.

On physical examination, patient was afebrile and his vitals were stable. His pulse was 100 /min and BP was 110/70 mm of hg. Abdominal examination revealed moderate tenderness in the periumbilical region without rebound tenderness, guarding and organomegaly. Murphy' s sign was negative and there was no costovertebral tenderness. Bowel sounds were hyperactive. Rest of the examination did not reveal any other abnormality.

Laboratory investigations revealed white cell count of 9200/mm³, hemoglobin of 12.4gm%. His renal and liver function tests were within normal limits. CT scan of the abdomen revealed several loops of jejunum with apparent wall thickening and “ targetoid” appearance with intussusception. There was no evidence of retroperitoneal adenopathy, hematoma, and pelvic mass or free fluid.

Patient underwent exploratory laparotomy after 12 hours of conservative management. Intra operative findings showed long segment jejuno- jejunal intussusception (Figure 1) with lead point as intra mural lipoma around 2*2 cm approximately around 90 cm from duodenojejunal flexure(Figure2). Laparotomy with resection and anastomosis of the jejunal segment was done. Post operative period was uneventful and patient was discharged on 10th day of admission.



Figure 1: Jejunal intussusceptions



Figure 2: lead point of intramural lipoma in jejunal intussusception

III. Discussion

Intussusception is the telescoping of proximal portion of bowel (called as intussusceptum) into an adjacent distal bowel (called as intussusciens). It is an infrequent cause of abdominal pain in adults. As opposed to that in children, most of the cases (about 90%) in adults have an identifiable cause. The lead point of intussusception is usually in the small intestine (enteroenteric) in 77 – 88% cases followed by colonocolic (6-15%), ileocecal (5-7%) and gastroenteric (2%) respectively.^[2]

Adult intussusception is a rare occurrence and is mostly secondary to neoplastic pathology. In surgically proven cases of adult intussusceptions, malignant causes have been described in 48% and 43% of enteric and colonic lesions respectively.^[3] Majority of benign etiologies for small bowel intussusception are secondary to polyps (Peutz-Jeghers, hamartomas, adenomas, gut stromal tumors and fibro-inflammatory), diverticular disease (Meckel's) and rarely lipomas.^[4]

In a study of 58 cases of surgically proven adult intussusceptions, most patients were found to have presented with signs and symptoms suggestive of bowel obstruction.^[3] However, it may present in a variety of chronic intermittent symptoms like vague abdominal pain (71%), nausea and vomiting (68%), abdominal distension with partial obstruction (45%) or palpable mass at physical examination; therefore the diagnosis of such a case clinically can be challenging and difficult.^[3, 5] A current jelly stool, that is a typical presentation in children, is not usually seen in adults. In view of non-specific symptoms, the diagnosis depends largely upon the radiological investigations and a C.T. scan with oral and intravenous contrast has been shown to be the most accurate diagnostic tool for the evaluation of intussusceptions.^[5]

Gastrointestinal lipomas are unusual benign slow growing tumors of submucosal origin which can occur at any part of gastrointestinal tract and account for 1– 2% of all GI tumors. Their peak incidence is seen in fifth to seventh decade of life with female predominance. Their presentation is vast and non-specific.^[6] They commonly present with mild to severe GI bleed, abdominal pain, constipation, diarrhea and intussusception.

Amongst them, 64% are seen in the colon, 4% in the second part of the duodenum and <2% are noted in the jejunum.^[5]

According to Mouaqit et al. of the total 51 reported cases of GI lipomas in the literature, only 26 originated from the small bowel and only 5 were from submucosa of the Jejunum.^[7] Jejunal lipomas are usually solitary but in 5% of cases they can be multiple in nature. They are usually incidentally detected and are mainly asymptomatic.^[5, 6] The best modality of investigation remains computed tomography especially in older population when possibility of malignancy cannot be ruled out. However, MRI is another modality with good sensitivity and specificity especially in younger population when malignancy is not suspected.

If lipoma and intussusception is not resected, a full obstruction or acute GI bleed might complicate patient in the future. Despite intermittent symptoms and lack of complete obstruction, a full resection of the lipoma and the invaginated segment of the small bowel remains the best modality of treatment.^[4] In such circumstances, a reduction of the intussusception following limited excision of the lipomata should not be attempted, as the weakened mesentery, local inflammation and systemic changes can result in further herniation, ischemia and intermittent intussusception. In rare scenarios, malignancy might also be an associated component. If malignancy is suspected or the bowel is inflamed or ischemic, resection without reduction should be performed.^[2]

IV. Conclusion

Adult intussusception is a rare occurrence and superimposed rare benign etiology like jejunal lipoma can complicate the clinical diagnosis and treatment in elderly. Their unusual presentation must be borne in mind. Ultrasonography and computerized tomography are useful diagnostic tools for the evaluation of this condition. Surgery offers definitive treatment and is recommended in all cases of adult intussusception. Jejunum lipomata are rare but they should be considered as a part of differential diagnosis in any GI bleed and obstructive (partial and intermittent) presentations in adult population.

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