

## Pedunculated Sub Mucosal Lipoma Leads to Ileao Ileai Intussusceptions in Adult Female with Non Obstructive Features - Case Report

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## ABSTRACT

**Introduction:** Ileal intussusceptions is the invagination of the small intestine within itself and accounts for 1% of cases of acute obstruction. However, physicians do not initially consider intussusception as a possible diagnosis of obstruction due to its rarity in adults.

**Case Report:** 55-year-old female who was admitted to the Emergency Department with continuous abdominal pain. Ultrasonography and computed tomography revealed ileal intussusceptions. The patient underwent surgical removal of the segment of the small bowel and end to end anastomosis done.

**Case Discussion:** Ileal intussusceptions with presence of Chronic abdominal pain make the surgeon difficult to choose conservative or surgical approach.

**Conclusion:** Adult intussusceptions is a rare disease and it differs from childhood intussusception in its presentation, cause and treatment

Key Words: Ileal intussusceptions, Bowel obstruction, Abdominal pain, Gastrointestinal lipoma, Ileum, Fibroid polyp

## **INTRODUCTION**

Intussusceptions is one of the most common causes of intestinal obstruction in infancy and childhood. It can occur at any age, but the peak incidence is usually between the fifth and ninth months of Infant. Intussusception is classified according to the duration of the symptoms. It is referred to as acute when the symptoms are under 24 hours' duration, sub acute when the symptoms are of one to 15 days' duration, and chronic when the symptoms are of more than 15 days' duration. More than 80% of intussusceptions are of the ileocolic type<sup>1</sup> Isolated ileoileal, jejunoileal, colocolic and cecocolic intussusceptions, on the other hand, are rare. Intussusception confined to the small bowel accounts for less than 10% of all cases of childhood intussusceptions.<sup>3,5</sup> Small bowel intussusceptions is usually reported as a part of a large series of intussusceptions but it is different clinically from the classic ileocolic intussusceptions. Not only is it seen in a different age group<sup>, 1</sup> but the presentation is different and there is more chance of finding a pathological lead point<sup>1, 6</sup>

## **CASE REPORT**

55-year-old female as admitted to our hospital with a 7-day history of periumbilical abdominal pain and then the pain had become aggravated. She had previously been in good health and his past medical history was unremarkable. Physical examination revealed diffuse abdominal tenderness, most markedly in the right lower quadrant, but no rebound tender-

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### DISCUSSION

ness was noted. The bowel sounds were increased and no mass was found without obstructive features. Her vital signs were blood pressure 140/90 mmHg, pulse rate 76/min, respiration rate 20/min and body temperature 36.5° c. The laboratory findings showed a white blood cell count of 13,400/ mm3, hemoglobin 15.9 g/dl, hematocrit 45.2% and platelets 283,000/mm3. All the other studies, including the electrolytes and urinalysis, were within the reference limits. Abdominal radiography showed localized ileus in the lower abdomen, and no free air or any air-fluid level was visible. The contrast-enhanced computed tomography (CT) scan showed the target lesion and a complex mass in the ileum with areas of high and low attenuation, which were all suggestive of intussusception. The CT scan also showed a homogeneous mass with fat attenuation in the ileum and this was diagnostic for lipoma. Ultrasonography showed the target sign and an echogenic intraluminal mass on the axial scan, and a sausage-shaped lesion was seen on the longitudinal scan. We performed emergency laparotomy under impression of ileoileal intussusceptions that was caused by a pedunculated polyp. On laparotomy, an ileo-ileal intussusceptions was identified 20 cm proximal to the ileocecal valve. Manual reduction was impossible due to the edema of the lesion; the involved ileal segment was resected and an end-to-end anastomosis was performed. Another intussusception was identified at the jejunum 50 cm distal to the ligament of Treitz, and then manual reduction was performed without any difficulty. No mass was palpated in the reduced bowel and no gross abnormality was seen. The postoperative period was uneventful and the patient was discharged on the 13th postoperative day. The resected ileum was about 40 cm in length, and the soft-natured, ovoid-shaped, 4×3×2 cm sized pedunculated polypoid mass was noted in the lumen of the resected ileum. Microscopic examination of the mass confirmed of a lipoma.



Figure 1: A rare ileo ileal intussusceptions caused by a polyp.

Intussusceptions are the invagination of a proximal segment of the bowel with its mesenteric fold the (intussusceptum) into the lumen of the adjacent distal segment the (intussuscipiens) as a result of peristalsis. Since its first description in 1674 by Barbette it was considered to primarily be a disease of infancy and early childhood. Adult intussusceptions represents 5%-16% of all cases of intussusceptions and 1%-5% of all cases of intestinal obstruction<sup>8</sup>. However, many cases that occurred in adults have been reported, and these account for approximately 5% of all intussusceptions, 1% of all intestinal obstructions and it shows an incidence of 0.003 to 0.02% of all hospital admissions<sup>1-5</sup> Adult intussusceptions is unusual and it differs from childhood intussusception in its presentation, cause and treatment. In contrast to childhood intussusception, most of adult intussusceptions are associated with an underlying lesion, and neoplasm's, both benign and malignant, are the most frequent causes of adult intussusceptions<sup>1, 2, 5-8</sup>. In the small bowel, the neoplasm's as the leading point of adult intussusceptions are the more often benign, and these include lipoma, Meckel's diverticulum, postoperative adhesion, adenoma and inflammatory fibrous polyps. Approximately 30% of them are malignant lesions, with metastases and lymphoma being the most frequent. In the large bowel, 60% to 70% of the cases show malignant lesions, including. Gastrointestinal lipomas are rare benign tumors that can occur anywhere along the gut, and they are the second most common benign tumors in the small bowel after gastrointestinal stromal tumors<sup>11</sup> The ileum is the most common site for lipoma in the small bowel, and there has been a study that reviewed such cases and it reported that 83% of the cases were in the ileum and 75% of them were found within 60 cm of ileocecal valve.11 The peak occurrence is in the fifth to seventh decades of life, with a slight female preponderance. Lipomas are usually solitary and of various sizes ranging from 1 to 30 cm, but multiple lipomas can be found anywhere in the gastrointestinal tract. Because of its usual position immediately superficial to the muscularis propria, gastrointestinal lipoma can produce intussusception as the leading point or intestinal obstruction by occlusion of the bowel lumen.8-10 Ulceration of the overlying mucosa or intussusception itself can produce gastrointestinal bleeding. The size and location of the lipoma and the mobility afforded by the pseudopedicle, when present, are associated with the clinical signs and symptoms. Lipomas less than 1 cm are usually asymptomatic and they are found incidentally, while 75% of those greater than 4 cm produce symptoms such as intussusception, intestinal obstruction and gastrointestinal bleeding <sup>8-10</sup> Malignant degeneration has never been reported.

The clinical diagnosis of childhood intussusception is usually suspected before performing imaging studies, yet the diagnosis of adult intussusception is often difficult because of the vague signs and symptoms. Adult intussusceptions usually presents with nonspecific symptoms that can be acute, intermittent or chronic. Abdominal pain is the most frequent symptom, with or without the symptoms of an intestinal obstruction 1-3,5,6 Even with the recent advances of the radiologic imaging modalities, intussusceptions is rarely diagnosed preoperatively. Barussaud et al<sup>2</sup> reported that the preoperative diagnosis was made in only 52% of patients, Azar and Berger, reported 32%, and Nagorney et al<sup>6</sup> reported 35%. Our patient had the typical findings of intussusceptions on CT and the CT scan showed a homogeneous intraluminal mass with fat attenuation (Hounsfield units between -80 and -120) in the ileum, so we could suspect the diagnosis of an ileoileal intussusceptions caused by an ileal lipoma 9-11. Computed tomography (CT) is the imaging method of choice for diagnosing intussusception and it can helpful in revealing the underlying lesion<sup>1,5</sup>. Several studies have proposed the laparoscopic approach as a safe and feasible therapeutic option for selected cases of adult intussusceptions, although the role of laparoscopy in managing adult intussusceptions is not yet clearly defined 14.

#### **CONCLUSION**

Ileo ileal intussusceptions in adults will have definite cause unless in pediatric group which is mostly idiopathic. Ileo ileal Intussusceptions in adult female is Difficult to diagnosis because of a dynamic obstructive feature with recurrent episodes. Ileo Ileal lipoma is very rare in my north coastal Andhra. In adult treatment of choice is segmental resection and end to end anastomosis of bowel. In children's treatment of choice conservative sometimes manual reduction.

**Conflict of Interest**: The authors declare that they have no competitive interests.

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