# **Case Report**

DOI: http://dx.doi.org/10.18203/2320-6012.ijrms20162961

# Ileo-ileal intussusception due to lipomatous growth

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Received: 02 July 2016 Accepted: 30 July 2016

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# ABSTRACT

Adult intussusception occurs infrequently and differs from childhood intussusception in its presentation, aetiology, and treatment. Diagnosis can be delayed because of its longstanding, intermittent, and non-specific symptoms and most cases are diagnosed at emergency laparotomy. With more frequent use of computed tomography in the evaluation of patients with abdominal pain, the condition can be diagnosed more reliably. Treatment entails simple bowel resection in most cases. Reduction of the intussusception before resection is controversial, but there is a shift against this, especially in colonic cases. In present case 40 years old female having abdominal pain on and off since 6 months, multiple ultrasonography reports were done with no abnormality detected.

Keywords: Intussesption, Ileum, Resection, Laparoscopy

# **INTRODUCTION**

Intussusception is the telescoping of one segment of the gastrointestinal tract into an adjacent one.<sup>1</sup> This condition is uncommon in adults, with two to three cases occurring in a population of 10,00,000 per annum and accounts for less than 0.1% of all adult hospital admissions.<sup>2-4</sup>

The diagnosis in adults is usually made at laparotomy, as most patients present as an emergency with intestinal obstruction. In non-emergency patients the diagnosis can be challenging as symptoms include intermittent abdominal pain that often settles comparatively quickly.<sup>5</sup>

Clinical examination and investigations are often negative and these patients will probably be labelled as having irritable bowel syndrome.

Although the surgical treatment is straightforward in most cases, in some patients, in particular those with gastroduodenal and coloanal intussusception, the operative aspect can be challenging.

# **CASE REPORT**

40 years old female came with complaints of Pain in abdomen since 6 months Abdominal pain was on and off in character, colicky in nature, non-radiating, usually starts as sudden onset vague abdominal pain, gradually progresses to become colicky in nature.

Patient had done ultrasonography of abdomen pelvis multiple times, but reports did not show any abnormality. Patient got admitted multiple times in various hospitals, treated conservatively as nonspecific abdominal pain and discharged as symptoms relieved. But each time symptoms reoccurred after few days of relief. No history of nausea, vomiting,bowel bladder complaints, fever. No history of any blunt truma or surgery of abdomen in past. No history of tuberculosis.

#### General examination

Pulse-100/min; BP-140/80mm of Hg; no pallor or icterus or generalized lymphadenopathy

### Per abdomen

Soft, tenderness over left iliac and hypogastric region, guarding over left iliac region, no rigidity, bowel sounds were exaggerated all over. USG abdomen pelvis done on admission suggestive of dilated proximal ileum and jejunum with collapsed large bowel, (?) recurrent intussusceptions. All laboratory parameters were within normal limits. Diagnostic laparoscopy has been done suggestive of ileo-ileal intussusceptions. Decision was taken to do exploratory laparotomy with prior consent of patient.

### **Operative** notes

Under spinal anaesthesia right paramedian incision was taken and deepened. On opening peritoneum and examining ileum there was ieao-ileal intussusception, affected segment excised and end to end anastomosis done. Abdomen closed in layers after keeping abdominal drain in left pelvis. On exploring specimen by vertical incision there was lipomatous growth over the mucosa of terminal ileum. Specimen sent for histopathological examination.



Figure 1: Intra operative photo showing small intestine loops with intussusception

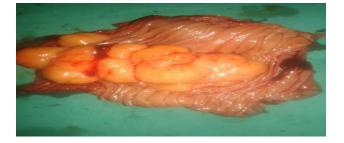


Figure 2: Lipomatous growth over mucosa of ileum.

#### Histopathology report

Lipomatous growth over ileum, post-operative recovery of patient was uneventful. Patient does not have any abdominal pain complaints since the surgery.

#### DISCUSSION

90% of adult intussusceptions have an organic cause, 60% developing due to neoplasms (60% malign and 24–40% benign).<sup>8,9,12</sup> The average age is 51 and they are

slightly more frequent in women.<sup>8</sup> Adult colonic intussusception is caused by a primary carcinoma in 65-70% of all cases, and small bowel intussusception is associated with malignant process in 30–35% of all cases.<sup>8</sup> Intussusceptions can be divided into four groups: enteric, ileocolic, ileocecal and colonic. Ileocolic constitute 15% of all intussusceptions.<sup>7</sup> Most ileocolic intussusceptions are due to malignancy, most commonly lymphomas followed by adenocarcinomas.<sup>8</sup>

The clinical presentation of intussusceptions can be very diverse in the adult. Abdominal pain is the most common symptom followed by obstruction and palpable mass.<sup>8,12</sup> Diagnosis can be achieved with adequate techniques such as US and CT. Yet, etiological preoperative diagnosis is difficult.<sup>7</sup> CT has a sensitivity of 58–100% and a specificity of 57-71% in determining the etiology; a "target sign" or a "sausage shaped" mass with different layers of attenuation can be shown in CT.<sup>2,6</sup> US is easy to perform and non-invasive, especially useful in children. Classic features like "target", "donut" signs or pseudokidney can be revealed on US but image interpretation can be difficult in presence of air.<sup>12</sup>

Gastrointestinal lipomas are benign tumors first reported in 1757 by Bauer.<sup>11</sup> They usually arise from the adipocytes in the submucosa (90%) and occasionally in the subserosa.<sup>10,11</sup> Lipomas account for 5% of all gastrointestinal tumors. They are the second most common benign tumors in the small intestine; and the third most common benign neoplasm in the colon following hyperplasic and adenomatous polyps.<sup>7,11</sup>

Lipomas are found most commonly in the colon (65–75%),especially in the right side followed by transverse colon, descending colon, sigmoid and rectum. 20–25% occur in the small intestine (most frequently ileum).<sup>7,10,11</sup> Small lipomas are usually asymptomatic and only casually detected in colonoscopy or surgery. Lipomas exceeding 2 cm diameter usually produce unspecific symptoms such as abdominal pain, diarrhea, or in rare cases acute clinical manifestations due to intussusception or bleeding.<sup>9,10,11</sup> In the case we report the patient related a history of three months of diarrhea before developing intestinal obstruction.

Lipomas can be diagnosed with endoscopy, capsule endoscopy, barium enemas, CT, US. Endoscopy can show a smooth yellow surface with a pedunculated or sessile base or either the "cushion-sign" or "naked fat sign". CT reveals a "sausage" like shaped mass and intussusception can be showed and confirmed on contrast enema ("crescent sign").<sup>7</sup>

The most important point in the diagnosis of intestinal lipomas is that it must be distinguished from a malignant colonic neoplasm, so the gold standard of diagnosis is the histopathology exam.<sup>11</sup> Urgent surgery is mandatory in case of intussusceptions, perforation or bleeding. The treatment of intussusceptions in adults is surgical. There

is a high risk of a malignant neoplasm so it is not advisable to attempt reduction.<sup>9,11</sup>

#### CONCLUSION

Intussusception in adults is an infrequent problem. The diagnosis of this condition can be difficult as symptoms are often non-specific and episodic. It is important to have a high index of suspicion.

The use of diagnostic laparoscopy in non-specific recurrent abdominal pain is tricky. Treatment requires resection of the involved bowel without attempted reduction in colonic lesions and in small bowel cases where the bowel is non-viable or where malignancy is suspected.

*Funding: No funding sources Conflict of interest: None declared Ethical approval: Not required* 

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**Cite this article as:** Bijwe PB, Najan DG, Hake PD. Ileo-ileal intussusception due to lipomatous growth. Int J Res Med Sci 2016;4:4205-7.