

## Case Report of Adult Intussusception

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### Abstract

Adult Intussusception (AI) is a rare entity and differs from childhood intussusception in its presentation, etiology, and treatment. It accounts for 1/30,000 of all hospital admissions, 1/1300 of all abdominal operations, 1/30-1/100 of all cases operated for intestinal obstruction and one case of AI for every 20 childhood ones. The case was a 49 years old male patient admitted to our hospital with crampy abdominal pain and vomiting of 14 hrs duration. Plain abdominal X-ray showed features of Small bowel obstruction and at laparotomy gangrenous ileo-ileo-colic intussusception starting at 8 cm proximal to ileocecal valve and multiple lymph nodes in the mesentery of distal ileum, was found. Resection and end to end anastomosis of the ileum was done and histopathology result of the mesenteric lymph nodes is pending. This was the first case of adult small bowel intussusception in our hospital.

**Keywords:** Intussusception; Benign; Malignant; Surgery

### Introduction

Intussusception is defined as the invagination of one segment of the gastrointestinal tract and its mesentery (intussusceptum) into the lumen of an adjacent distal segment of the gastrointestinal tract (intussusciens). Sliding within the bowel is propelled by intestinal peristalsis and may lead to intestinal obstruction and ischemia.

Adult intussusception is a rare condition which can occur in any site of gastrointestinal tract from stomach to rectum. It represents only about 5% of all intussusceptions (Agha, 1986) and causes 1%-5% of all cases of intestinal obstructions [1-5]. Intussusception accounts for 0.003%-0.02% of all hospital admissions [6]. The mean age for intussusception in adults is 50 years, and the male to female ratio is 1:1.3 [7]. The child to adult ratio is more than 20:1. The condition is found in less than 1 in 1300 abdominal operations and 1 in 100 patients operated for intestinal obstruction. Intussusception in adults occurs less frequently in the colon than in the small bowel [8-10].

Mortality for adult intussusceptions increases from 8.7% for the benign lesions to 52.4% for the malignant variety [9-13].

### Case Report

49 years old male patient presented with crampy intermittent abdominal pain that started in the periumbilical area gradually worsened over the last 14 hrs. Associated with this he has several episodes of vomiting of bilious matter and eventually developed failure to pass feces and flatus. Apart from these he has no known medical illness or past surgery.

No history of similar episodes

Has history of chronic PUD P/E

G/A: acutely sick

V/S: PR: 90 RR: 22 T°: 37°C BP: 140/80 mmHg

Abdomen: distended, mildly tender, palpable soft mass in the RLQ, no sign of fluid collection PR: soft stool in the rectum, no blood

Assessment: SBO secondary to Small bowel volvulus

Investigations: CBC wbc 15,000/ $\mu$ l, 64% Neutrophil predominant, hct 40%, plt 383,000/ $\mu$ l, Bg & Rh O+

Abdominal x-ray: multiple dilated small bowel loops, and air fluid levels (Figure 1).



**Figure 1:** Abdominal x-ray: multiple dilated small bowel loops.

Intraoperative finding: dilated small bowel loops and dilated cecum, minimal reactive fluid in the peritoneal cavity. 30 cm of gangrenous ileo-ileo-colic intussusception 8 cm proximal to the ileocecal valve (Figure 2). Multiple mesenteric LN in the small bowel mesentery.

Operation: Gentle reduction of some part and enbloc resection of the irreducible gangrenous small bowel segment and end to end anastomosis in the distal ileum. Biopsy taken from mesenteric lymph nodes. Lavage of peritoneal cavity.

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**Figure 2:** intussusception 8 cm proximal to the ileocecal valve.

### Discussion

Intussusception of the gut is characterized as the extending of a proximal portion of the gastrointestinal tract inside the lumen of the nearby fragment. This condition is regular in kids and presents with the exemplary group of three of squeezing stomach torment, horrendous the runs and an obvious delicate mass. Be that as it may, gut intussusception in grown-ups is viewed as an uncommon condition, representing 5% of all instances of intussusceptions and practically 1%-5% of entrails hindrance. Eight to a fifth of cases are idiopathic, without a lead point sore. Auxiliary intussusception is brought about by natural injuries, for example, fiery inside sickness, postoperative grips, Meckel's diverticulum, harmless and threatening sores, metastatic neoplasms or even iatrogenically, because of the presence of gastrointestinal cylinders, jejunostomy taking care of cylinders or after gastric medical procedure. Processed tomography is the touchiest symptomatic methodology and can recognize intussusceptions with and without a lead point. Medical procedure is the conclusive therapy of grown-up intussusceptions. Formal entrails resection with oncological standards is kept for each situation where harm is thought. Decrease of the intussuscepted entrails is viewed as safe for harmless sores to restrict the degree of resection or to keep away from the short gut condition in specific conditions [14-16].

In grown-ups, the specific system of entrails intussusception is obscure essential or idiopathic in 8%-20% of cases and is bound to happen in the small digestive tract. Then again, optional intussusception is accepted to start from any pathologic injury of the gut divider or aggravation inside the lumen that changes typical peristaltic action and fills in as a lead point, which can start an invagination of one section of the entrails into the other. Schematically, intussusception could be depicted as an interior prolapse of the proximal inside with its mesenteric overlay inside the lumen of the contiguous distal entrails because of exuberant or hindered peristalsis, further blocking the free section of digestive items and, all the more harshly, compromising the mesenteric vascular progression of the

intussuscepted portion. The outcome is inside hindrance and provocative changes going from thickening to ischemia of the gut divider [17-19].

### Conclusion

Operative Course in the hospital Patient was on Ceftriaxone 1 gm iv bid and metronidazole 500 mg iv, started on feeding on the 3rd Post op day and normal diet on 5th post op day and discharged improved on the 9th post op day.

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Consent is taken from the patient about publishing his case.

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