

# Intussusception of Small Intestine as a Result of Inflammatory Fibroid Polyp Causing Small Bowel Obstruction in an Adult Patient

## Patient

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## INTRODUCTION

Intussusception is the invagination or telescoping of one segment of intestine into adjacent segment. proximal segment of bowel is called intussusceptum which is intussuscepted into the lumen of the adjacent distal segment known as intussusciens.<sup>1,2</sup> Intussusception is a rare clinical finding in adult and accounts for only 5% of all intussusception cases and common in children from 6-18 months age leading to intestinal obstruction.<sup>3</sup> Intussusception is rare in adults, 2-3 cases are reported in 1,00,000 and less than 0.1% of admitted hospital patients.<sup>4,5</sup> In most of the adult patients, it is secondary to a pathological condition that serves as a lead point, e.g. Meckel's diverticulum, Strictures, Neoplasms. Fibroid polps

## ABSTRACT

Intussusception is the telescoping of one segment of bowel into the adjacent segment. It is more commonly seen in children, however rarely encountered in adult patients. Proximal segment of bowel is called intussusceptum which is intussuscepted into the lumen of the adjacent distal segment known as intussusciens. There is always a lead point causing this disorder especially in adults. We presented a case of a 45 year old man who presented in emergency department of our institute with history and clinical features of acute intestinal obstruction since 10 days. Patient was resuscitated, investigated and taken for exploratory laparotomy under General anaesthesia. Segment of involved small gut was resected and well circumscribed polypoidal mass was found in intussuscepted bowel. Histopathological examination of the specimen revealed the features of inflammatory fibroid polyp.

## KEY WORDS

*Inflammatory fibroid polyp, Intussusception, Small bowel obstruction*

of small gut causing this condition has been seen rarely worldwide. Surgical treatment remains the treatment of choice in adults.

## CASE REPORT

We present here a case of 45 year old male patient who was admitted in emergency department of our hospital with complaints of pain abdomen, multiple episodes of vomitings and obstipation since 10 days. Patient was unable to pass stool and flatus and there was progressive increase in distention of abdomen. There was no history of

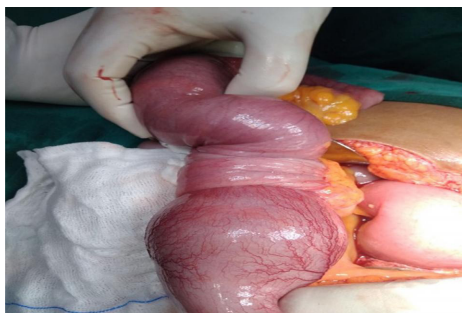
bleeding per rectum or trauma. Patient had no comorbidity. On examination, patient was haemodynamically stable and his abdominal examination revealed distended abdomen with mild diffuse tenderness, external genitalia and rectal examination was normal. X-ray abdomen in upright posture shows multiple air fluid levels (fig. 1).



**Figure 1.** Showing upright x ray of patient with multiple air fluid levels.

Ultrasonography whole abdomen revealed distended small gut loops, intergut fluid and a strong suspicion of intussusception of small bowel. Patient was resuscitated and planned for emergency laparotomy which was performed by midline vertical incision under general anaesthesia. Intra operatively ileo-ileal telescoping was found approximately 15-20 cm proximal to ileocaecal junction. Segment was resected and well circumscribed, encapsulated globular mass of the size of 8x5 cms was found in intussuscepted gut (fig. 2,3). Gastrointestinal continuity was restored.

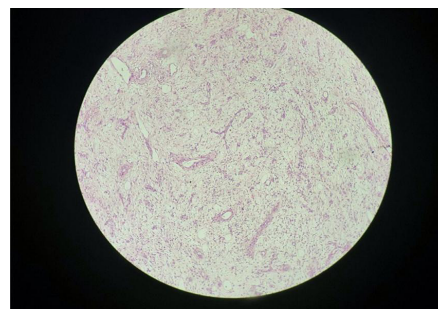
Resection of the involved segment of ileum was done and gastro intestinal continuity was restored. Histopathological examination of the resected specimen revealed inflammatory fibroid polyp with spindle and stellate cells (fig. 4) with few collections of lymphocytes and marked vascularisation (fig. 5).



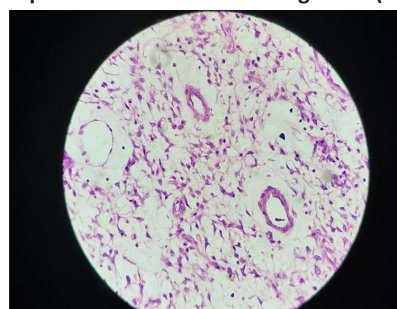
**Figure 2.** Picture showing telescoping of one segment of small bowel into other.



**Figure 3.** Picture showing intraluminal view of small gut with fibroid polyp arising from antimesenteric border of ileum, a lead point for intussusception.



**Figure 4.** Section shows a tumour composed of spindle to stellate cells present in edematous background (H and E 100X).



**Figure 5.** Section showing vascular proliferation and sprinkling of lymphocytes (H and E 400X)

Postoperatively patient was stable, tolerated meals orally and passed stools and flatus. He was discharged on 7<sup>th</sup> postoperative day in a stable condition.

## DISCUSSION

Intussusception can be classified depending upon the underlying causative factors as primary or secondary. Secondary intussusception can be due to benign or malignant lesions. Inflammatory fibroid polyps are rare benign lesions of uncertain origin that may occur in various parts of the gastrointestinal tract and originate from the sub-mucosa at different sites of the digestive tract. They are generally located in the stomach and small bowel. It is one of the probable diagnoses that should be considered in obstructive tumors of the small intestine apart from gastrointestinal stromal tumours (GIST) causing invagination of gut segment. Intussusception secondary to Inflammatory fibroid polyps of the small intestine are difficult to diagnose without recognition of its clinical and pathological features. Contrast enhanced computed tomography is useful in confirming an anatomical abnormality and histopathological examination establishes the final diagnosis of inflammatory fibroid polyps.<sup>6</sup>

Although Inflammatory fibroid polyps are rare and benign, surgery is the only solution in case of intestinal obstruction as was done in our case also.<sup>7</sup>

So, these types of polyps are typically an incidental finding intraoperatively, but rarely have been presented as the cause of intussusception or obstruction as was seen in our case.<sup>8</sup>

It is necessary that the surgeons should have a high index of suspicion for intussusception in the adult patients, who present with chronic intermittent symptoms of intestinal obstruction like vomiting, abdominal distension or constipation, as majority of cases are associated with malignancy. En bloc resection of the involved bowel without attempt at reduction is the recommended surgical procedure.<sup>9</sup>

Intussusception in adults is a rare clinical entity causing features of intestinal obstruction but needs full evaluation to rule out malignancy. Further more inflammatory fibroid polyps can result in intussusception of small bowel in adults and need surgical resection.

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