



## Ascending Colon Carcinoma Ended Up Causing Adult Colo Colic Intussusception - A Case Report

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### Abstract

Adult intussusception is rare in comparison to paediatric age groups. The cause of Colo Colic Intussusception would be unknown. In this case report presentation, we discussed a 68-year-old female patient who was hospitalized with complaints of pain in the abdomen, anemia, dehydration, and weight loss. Intraoperatively, colo colic intussusception at ascending colon was observed and the tumor was palpable at the same site. This case illustrates the need to understand the underlying lead point as the cause of adult intussusceptions.

**Keywords:** Colo-colic Intussusception; Adenocarcinoma; Intra-luminal Disease

### Introduction

Intussusception refers to the telescoping of a proximal segment of the gastrointestinal system into the distal lumen, which was first described by Paul Barbette in 1674 [1,2]. It paves way to for intestinal obstruction while lowering the risk of complications such as parietal ischemia, perforation, and peritonitis [2]. Adult intussusception is rare, with colonic intussusception accounting for approximately 20% of all cases [1]. There is a diagnostic challenge for surgeons because it requires modern imaging modalities to detect and is expensive.

In this case report, we presented a rare case of colo-colic intussusception of a 68-year-old female along with the presence of tumour, which was found to be poorly differentiated adenocarcinoma.

### Case Report Presentation

A 68-year-old female patient was admitted to the emergency room with complaints of right sided abdominal pain, weight loss, loss of appetite, anaemia and dehydration. Past medical history was unremarkable. Laboratory test suggested anaemia (Hb 8 gm/dl).

Initial ultrasonography of the abdomen revealed intussusception in subhepatic location for a length of 7.5 cm giving sandwich/target appearance.

CECT Abdomen revealed an endophytic polypoidal mass lesion in ascending colon at hepatic flexure with evidence of bowel within bowel configuration noted at ascending colon with adjacent mesentery insinuating into hepatic flexure at the site of mass lesion

along with metastatic regional pericolic lymph nodes at least 3 in number (Figure 1).



Figure 1: Showing target sign in subhepatic region.

Since, the patient was not in frank intestinal obstruction, colonoscopy was done which showed large (5x4 cm) polypoidal ulceroproliferative friable lesion causing complete luminal compromise which limited negotiation of scope further into lumen. Biopsy revealed poorly differentiated adenocarcinoma (Figure 2).

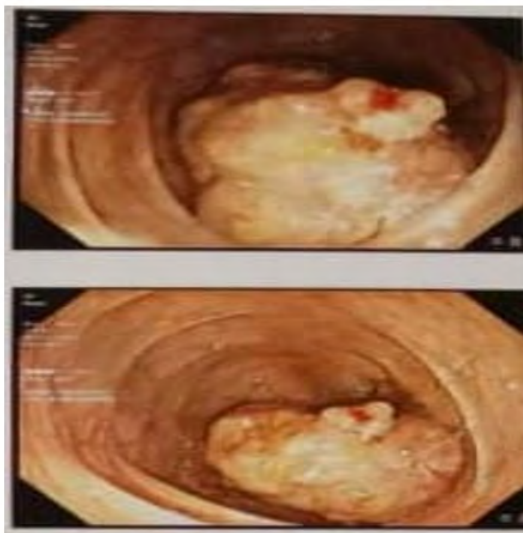


Figure 2: Showing colonoscopy findings- intraluminal exophytic growth at hepatic flexure.

After obtaining due informed consent, the patient was taken up for definitive surgery. Intra operatively, colo colic Intussusception was noted at ascending colon with tumour palpable at same site indicates right radical hemicolectomy (D2) with lymphadenectomy performed in this patient (Figure 3 and 4). Histopathology revealed a 5cm tumour with T3N1M0 (stage III), poorly differentiated adenocarcinoma. Post-operative course of the patient was uneventful.

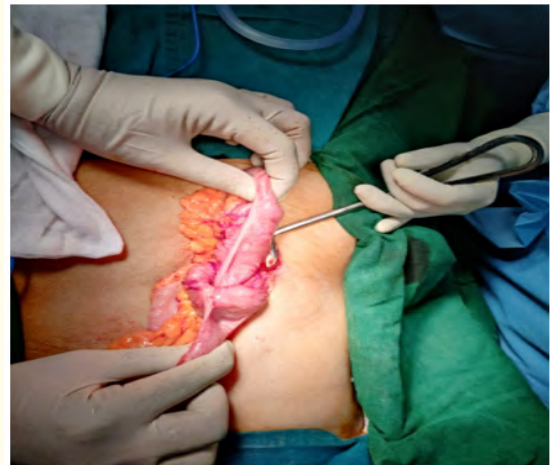


Figure 3: Showing colo colic Intussusception.



Figure 4: Showing En bloc resected specimen of D2 right radical hemicolectomy.

## Discussion

The most sensitive diagnostic approach for a preoperative diagnosis of adult intussusception appears to be abdominal computed tomography (CT), especially in patients who arrive with non-specific abdominal discomfort [3]. It also aids in discovering pathological lesions that may act as lead points, guiding in the identification of potentially life-threatening vascular impairment, and, interestingly, it can forecast the likelihood of self-resolution in some cases [4].

The typical look of "Target Sign" does not have to be present in every circumstance. The presence of intussusception in our patient raised our suspicions of colon cancer, which was verified during operational investigation.

The therapy of intussusception of the colo-colic type is frequently disputed. Because the majority of adult intussusceptions have underlying disease, laparotomy rather than reduction is also recommended [1]. The sole point of contention is whether or not the intussusception lesions should be reduced during the procedure. Some research suggests that lesions should be reduced before being reset. The main downside of this method is the likelihood of cancerous cells spreading throughout the body. While another school of thinking supports this since it may avoid needless bowel resections and small gut syndrome is readily prevented [5].

Chen., *et al.* observed simultaneous double colo-colic intussusception with macroscopic type I or villous cancer with serosal invasion in both adenocarcinomas [6]. In this case, the final histology revealed subserosal involvement, confirming the same aetiology.

Neoplastic lead points were bigger and longer than non-neoplastic leadpoints, according to Warshauer., *et al.* [7].

In a study done by Vikas., *et al.* discovered that adult intussusception is caused by a defined intra-luminal disease in a tropical nation. In their series, the location of intussusception was identical to that of Brazil, another tropical nation. Idiopathic intussusception is rather uncommon. As a result, they advocated for customised therapy based on the findings of surgical intervention. The resection should encompass any nonviable bowel as well as the intussusception lead point. For malignant tumours, en-bloc resection is advised [8]. In this case, the decision to proceed with

right radical hemicolectomy with D2 lymphadectomy was made and the postoperative course in this patient was uneventful.

Intussusception has the potential for life-threatening consequences such as peritonitis, intestinal ischemia, bowel necrosis, bowel perforation, sepsis, and tumour seeding due to the high likelihood of delayed identification due to ambiguous symptoms and extensive working differential diagnosis [5].

## Conclusion

Surgical intervention is the only the management option. If it is detected preoperatively, the attending surgeon should have a high index of suspicion for a malignant aetiology as a lead point and provide a more drastic surgical approach. CT imaging is a popular method of diagnosis.

## Consent

Written informed consent obtained from the patient for publication of this case report.

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