

ADULT INTUSSUSCEPTION : A CASE REPORT

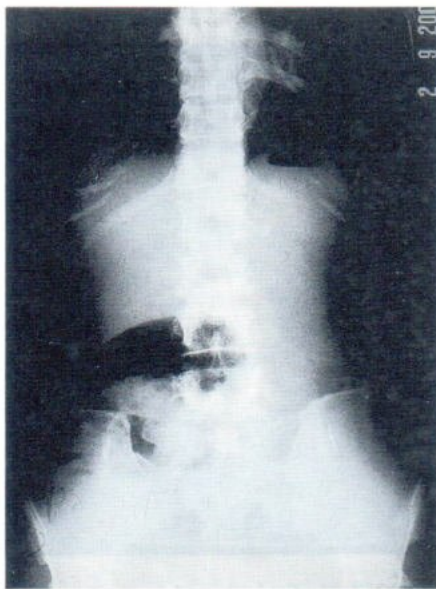
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Intussusception is mostly often found in infants and children. Adult intussusception is rare and the underlying cause can be identified in most cases, while the etiology in children is mostly idiopathic. The symptom and sign are often chronic and relapsing, presenting as recurrent episodes of subacute obstruction and variable abdominal signs. Ultrasound and CT studies play an important role in establishing the diagnosis. Therefore I would like to report one case of adult intussusception with the literatures reviewed.

CASE REPORT

A 42-year-old woman presented with a 6-month history of chronic abdominal pain, predominantly at the mid-abdomen, with a weight loss of 10 Kgs. in 6 months. Previously she had been healthy and had had no history of operation. Physical examination revealed a pale, cachectic patient without a palpable mass. Acute abdomen series showed colonic contents in right-sided colon and dilated mid-transverse colon suggestive of obstruction at mid-transverse colon

(Fig.1 A,B). Ultrasound shows bowel mass, measuring about 3.8x3.4 cm. in size, and the various layers, concentric rings may represent mesentery and bowel wall that has been drawn into the intussusception (Fig.2). CT findings are compatible with intussusception at mid-transverse colon (Fig.3). Exploratory laparotomy was performed and found similar findings on CT scan. Transverse colon resection with end to end anastomosis was performed.



A



B

Fig.1 a,b. Plain film abdomen supine and upright view revealed dilated right part of transverse colon with much colonic contents contained (arrows) and absent contents in left sided colon suggestive of colonic obstruction at mid-transverse colon.

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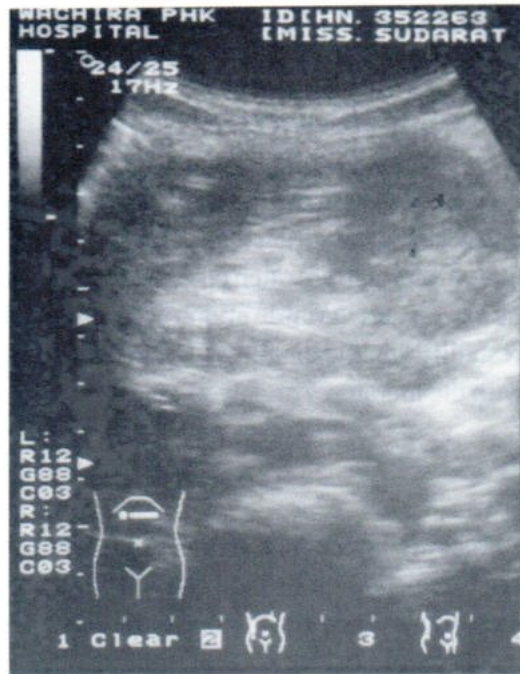


Fig. 2 Longitudinal scan shows bowel mass (arrows) and multifocal echogenic center and sonolucent periphery represent edematous wall.

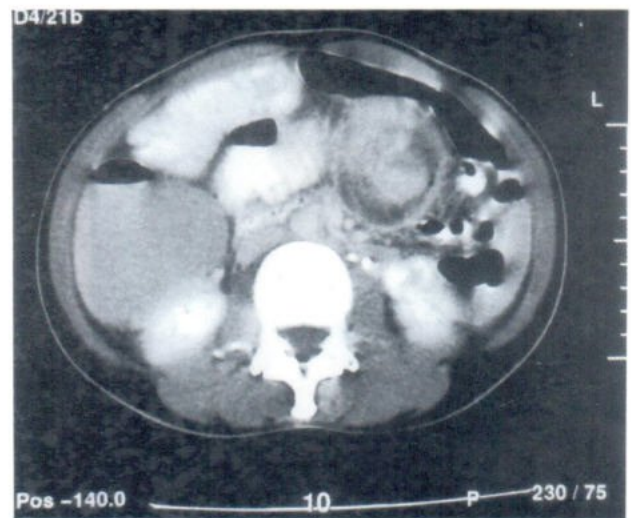
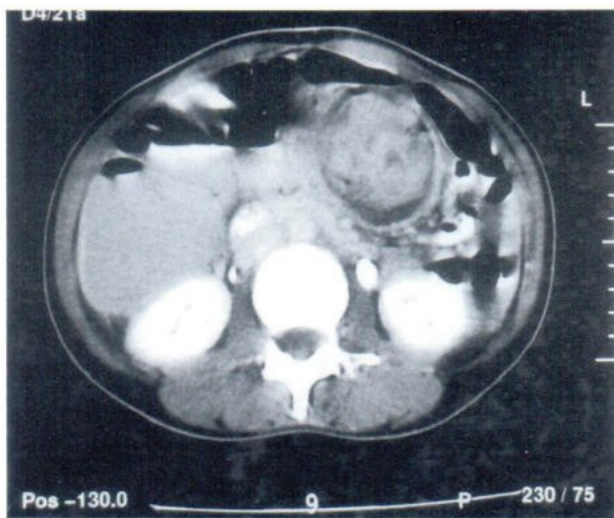


Fig. 3 Axial CT scan shows bowel in bowel appearance with mesenteric fat being drawn into the intussusception.

DISCUSSION AND REVIEW OF LITERATURE.

Intussusception is defined as prolapse of proximal segment of bowel (intussusceptum) into an adjacent distal segment (intussusciens), is a rare condition in adults and differs substantially from the much more common intussusception in infants (only about 5 % of intussusceptions occur in adults, while 95 % in infants). Intussusception causes 1% of all bowel obstruction.¹ In contrast to childhood intussusception, which is idiopathic in 90% of cases, adult intussusception has an underlying cause in about 90%.¹⁻⁸ Neoplasm is the most common cause in these series and was found in approximately 65% of the adult cases. Non-neoplastic processes constitute 15-25% of the cases, and idiopathic or primary intussusception about 10%.⁸ In the majority of cases, (about 65%) intussusception arises in the small bowel. The etiology can be classified broadly into the major headings of

- 1) neoplastic diseases
- 2) post-surgical complication (e.g. adhesion, bowel wall edema)
- 3) miscellaneous pathology (e.g. Meckel's diverticulum, coeliac disease, AIDS related gastrointestinal disorder) and
- 4) idiopathic

Intussusception in the large bowel is more likely to have a malignant etiology, with primary malignant lesions, adenocarcinoma and lymphoma occurring in 50-60% of the cases.^{8,9}

Clinical presentation of adult intussusception is variable, most often chronic intermittent abdominal pain. Other symptoms include nausea/vomiting, melena, weight loss, fever and constipation.^{2,10-11} Symptoms are in most cases of long duration, lasting several weeks to several months. Physical examination is often unremarkable. Intussusception in adults therefore difficult to be diagnosed clinically and

necessitates imaging.² The role of plain abdominal radiograph is limited in adult intussusception where findings are usually non-specific. There might or might not be signs of bowel obstruction with an associated soft tissue mass.

The sonographic appearance of intussusception presents as an oval, pseudokidney mass with central echoes on longitudinal imaging and a sonolucent donut or target configuration on cross-sectional imaging.¹²⁻¹⁴ The central echoes are apparently compressed mucosa of the intussusception head, and the central echoes are apparently compressed mucosa of the intussusception head, and the various layers and concentric rings may represent mesentery and bowel wall has been drawn into the intussusception. The sonolucent periphery is apparently the edematous wall of the intussuscepted intestinal head. Adult intussusception often found a leading point. The CT appearance of intussusception is characteristic and allows confident diagnosis to be made. The cardinal features are:

- 1) Thickening of the affected bowel loop due to telescoping of two bowel segments. This procedure a "target" or "sausage" shaped mass-like lesion depending on the orientation of the intussusception.
- 2) Eccentrically located fat attenuation areas and mesenteric vessels within the intussusception representing invaginated mesentery.
- 3) Demonstration of the leading mass of intussusception surrounded by air or contrast.

Further management following the diagnosis of intussusception in adult is almost invariably surgery. Given the high rate of malignancy, surgical resection of the affected bowel segment without reduction is usually undertaken.

CONCLUSION

Adult intussusceptions are rare. Most causes of them are neoplasm. Clinical symptom is nonspecific. With the wide spread use of ultrasound and CT in the evaluation of non-specific abdominal pain, the diagnosis of intussusception is nowadays most often made by the radiologist since the ultrasound and CT features described here are virtually pathognomonic.

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