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CASE REPORT

A CASE OF ADULT INTUSSUSCEPTION: A CASE REPORT

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Abstract

Intussusception is a relatively frequent cause of bowel obstruction in infancy, but it accounts for only 02% of bowel obstruction in the adult population. The median age of presentation in adults with intussusception is sixth to seventh decade. In the vast majority of adult intussusceptions, there is a demonstrable inflammatory lesion or a neoplasm that serves as the lead point of the intussusception. However, up to 20% of adult cases are idiopathic. Neoplasms causing intussusception in adults are malignant in almost 50% of patients. In experienced units, more than 70% of intussusceptions can be reduced non-operatively. An irreducible intussusception or one complicated by infarction or a pathological lead point requires resection and primary anastomosis.

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Introduction:-

Intussusception occurs when one portion of the gut invaginates into an immediately adjacent segment; almost invariably, it is the proximal into the distal. The condition is encountered most commonly in children, with a peak incidence between 5 and 10 months of age[1]. Intussusception is a relatively frequent cause of bowel obstruction in infancy, but it accounts for only 2% of bowel obstruction in the adult population[2]. About 90% of cases are idiopathic but an associated upper respiratory tract infection or gastroenteritis may precede the condition. It is believed that hyperplasia of Peyer's patches in the terminal ileum may be the initiating event. Weaning, loss of passively acquired maternal immunity and common viral pathogens have all been implicated in the pathogenesis of intussusception in infancy. Children with intussusception associated with a pathological lead point such as Meckel's diverticulum, polyp, duplication, Henocho-Schoenlein purpura or appendix are usually older than those with idiopathic disease. After the age of 2 years, a pathological lead point is found in at least one-third of affected children[1]. Adult cases are invariably associated with a lead point, which is usually a polyp (e.g., Peutz-Jeghers syndrome), a submucosal lipoma or other tumour.

Case Report:

We report a case of 40 years male who presented with the complaints of pain in lower abdomen for 04 months, dull aching, intermittent with no aggravating and relieving factors and 02 episodes of vomiting the previous day. The patient had the history of similar episodes for the past 02 years and was treated by taking medications, and he was vegetarian by diet with good appetite, regular bowel and bladder habits. On examination, abdomen was soft to palpate with mild tenderness in umbilical and right iliac fossa. Ultrasound scan of abdomen and pelvis was done

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which showed the invagination of bowel within bowel in left lumbar region suggestive of ileo-ileal intussusception. This was followed by contrast enhanced computed tomography of abdomen and pelvis which was suggestive of ileo-ileal intussusception in the pelvis containing mesenteric fat and vessels with no evidence of bowel obstruction.

After necessary pre operative work-up the patient was posted for exploratory laparotomy. Intra-operatively intussusception was noted in the jejunio-ileal segment, manually reduced and 02*02 centimetres, firm, intra-luminal, sessile growth noted which was the lead point of intussusception. Resection and anastomosis was done to remove the bowel segment involving the lead point and was sent to histopathological examination. The post operative period was uneventful. The histopathological examination of lead point of intussusception showed the features suggestive of a benign adenoma (Tubulo-villous type).



Fig 01:- Jejunio-ileal intussusception.



Fig 02:- Intraluminal growth as a lead point noted after reduction of intussusception.



Fig 03:- Resection and anastomosis of bowel segment involving lead point.



Fig 04:- Intraluminal growth as lead point.

Discussion:-

An intussusception is composed of three parts:

1. the entering or inner tube (intussusceptum);
2. the returning or middle tube;
3. the sheath or outer tube (intussusciens).

The part that advances is the apex, the mass is the intussusception and the neck is the junction of the entering layer with the mass[1].

Intussusception may be anatomically defined according to the site and extent of invagination. In most children, the intussusception is ileocolic. In adults, colocolic intussusception is more common. The degree of ischaemia is dependent on the tightness of the invagination, which is usually greatest as it passes through the ileocecal valve. On

CT scanning the target sign may be evident and if present is pathognomonic. It is worth noting that, rarely, intussusception has been noted on CT scanning in asymptomatic adults[1].

The classical presentation of intussusception is with episodes of screaming and drawing up of the legs in a previously well male infant. The attacks last for a few minutes and recur repeatedly. During attacks the child appears pale; between episodes he may be listless. Vomiting may or may not occur at the outset but becomes conspicuous and bile-stained with time. Initially, the passage of stool may be normal, whereas, later, blood and mucus are evacuated – the ‘redcurrant jelly’ stool[1].

Whenever possible, examination should be undertaken between episodes of colic, without disturbing the child. Classically, the abdomen is not initially distended; a lump that hardens on palpation may be discerned but this is present in only 60% of cases. There may be an associated feeling of emptiness in the right iliac fossa (the sign of Dance). On rectal examination, blood-stained mucus may be found on the finger. Occasionally, in extensive ileocolic or colocolic intussusception, the apex may be palpable or even protrude from the anus. Unrelieved, progressive dehydration and abdominal distension from small bowel obstruction will occur, followed by peritonitis secondary to gangrene. Rarely, natural cure may occur as a result of sloughing of the intussusception[1].

An abdominal ultrasound scan has a high diagnostic sensitivity in children, demonstrating the typical doughnut appearance of concentric rings in transverse section. CT scanning is currently considered the most sensitive radiological method to confirm intussusception, with a reported diagnostic accuracy of 58–100%. The characteristic features of CT scan include a ‘target’- or ‘sausage’- shaped soft-tissue mass with a layering effect; mesenteric vessels within the bowel lumen are also typical[1].

Non operative reduction is contraindicated if there are signs of peritonitis or perforation, there is a known pathological lead point or in the presence of profound shock. In experienced units, more than 70% of intussusceptions can be reduced non-operatively. Recurrent intussusception occurs in up to 10% of patients after non-operative reduction. Reduction is achieved by gently compressing the most distal part of the intussusception toward its origin, making sure not to pull. The last part of the reduction is the most difficult. After reduction, the terminal part of the small bowel and the appendix will be seen to be bruised and oedematous. The viability of the whole bowel should be checked carefully. An irreducible intussusception or one complicated by infarction or a pathological lead point requires resection and primary anastomosis[1].

Conclusion:-

Adult intussusception comprises of 05% of all intussusception cases out of which 20% are idiopathic and 80% have identifiable cause[3][4]. Here, the patient presented was of 40 years age in contrast to median age of presentation in adults with intussusception. The benign lead point leading to intussusception in middle-aged men are very rare as neoplasms causing intussusception in adults are malignant in almost 50% of patients[3]. Proper evaluation of the patients who presents with abdominal pain, with clinical examination and required radiological investigations will help in early diagnosis and management of case which also will reduce the further complications and morbidity.

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