

Case Series on - (Non - Hodgkin's Lymphoma)

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Abstract: *Intestinal obstruction in children is frequently caused by intussusception. Intussusception cases in children are mostly ileocolic, whereas, the colocolic variety is a rare entity and very few cases have been reported in literature. We report a 9/year - old child of colocolic intussusception with non - hodgkin's lymphoma and 4/year old child with colocolic intussusception with non - hodgkin's lymphoma being the pathological lead point. It is an extremely rare association which has not been reported previously.*

Keywords: abdominal pain, Vomiting, mass felt per abdomen

1. Case Report

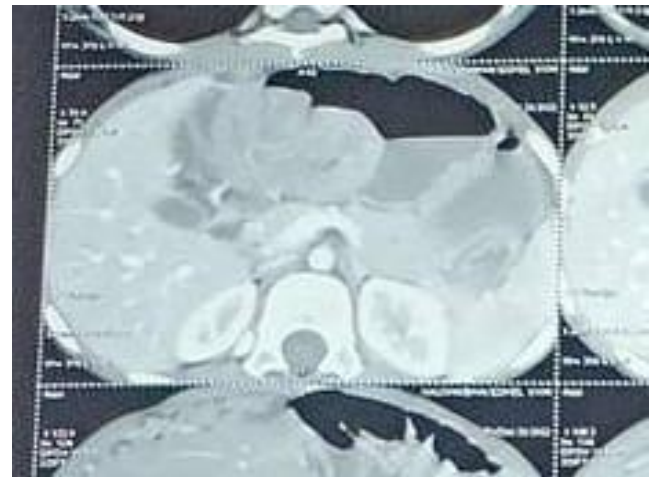
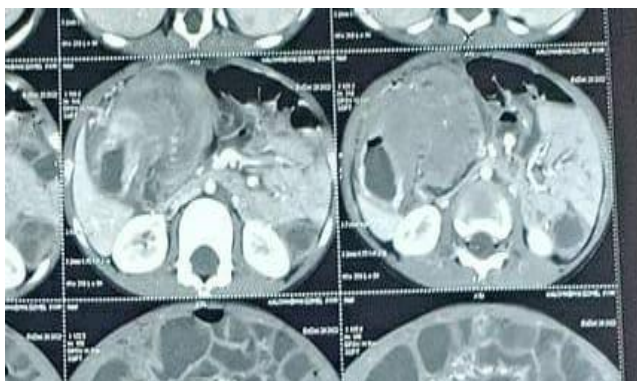
A 9 year male child brought to surgery department P. D. U. civil hospital Rajkot on 29th December 2021 with the chief complaint of abdominal pain and vomiting for 7 days. Abdominal pain was over right upper quadrant of abdomen which was insidious in onset and gradually progressive with mild to moderate in nature with vomiting contains mainly food particle and gastric contents of 2 - 3 vomiting episodes for 3 days. For which patient's outside ultrasound suggestive of bowel within bowel forms classical target sign s/o small bowel intussusception.

Per Abdomen examination mass was palpated at right upper quadrant sausage shaped approx 5*5 cm² size with well defined margin, firm consistency, non mobile mass not moves with respiration with tympanic note and bowel sounds sluggishly present and per rectal examination was nad.

All the blood investigations were within normal limit

Xray suggestive of gaseous abdomen

Ultrasound imaging suggestive of 76 mm long bowel segment noted in epigastric region with 60 mm diameter of target sign with edematous inflamed bowel loops with normal vascularity s/o large bowel intussusception.



CECT (abdomen + pelvis) suggestive of bowel within bowel involving hepatic flexure of colon and proximal transverse colon. Diffuse circumferential soft tissue thickening with max thickness approx 24 mm and length of segment is approx 114 mm p/o colocolic intussusception with underlying neoplastic etiology (lymphoma) likely.

Exploratory Laparotomy with Transverse abdominal incision was made and on exploration, colocolic intussusception with 10 cm long segment involving caecum, ascending colon and proximal transverse colon with 5*5*4 cm³ lump as leading point. Wall of ileum, ascending colon, proximal transverse colon found thickened with multiple enlarged mesenteric lymphnodes. Followed by Resection of Terminal 10 cm ileum, ICJ, ascending colon and proximal 1/3rd transverse colon lump with Ileo - ascending Anastomosis was done in two layers and pelvic drain of 20 Fr was kept and layered closure of abdomen was done. Patient was extubated and immediate post operative period was uneventful. Patient was shifted to surgery ward and sips to liquids oral intake started on POD - 4. drain were removed on POD -

Histopatho report



Case Report

A 4 year male child brought to surgery department P. D. U. civil hospital Rajkot on 25th December 2021 with the chief complaint of constipation for 3 days and Excessive Crying

for 3 days and vomiting mainly contains food particles 2 - 3 frequency for 2 days.

Per abdomen examination soft, Non tender, No Guarding, No rigidity.

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All the blood Investigations were within Normal Limit.

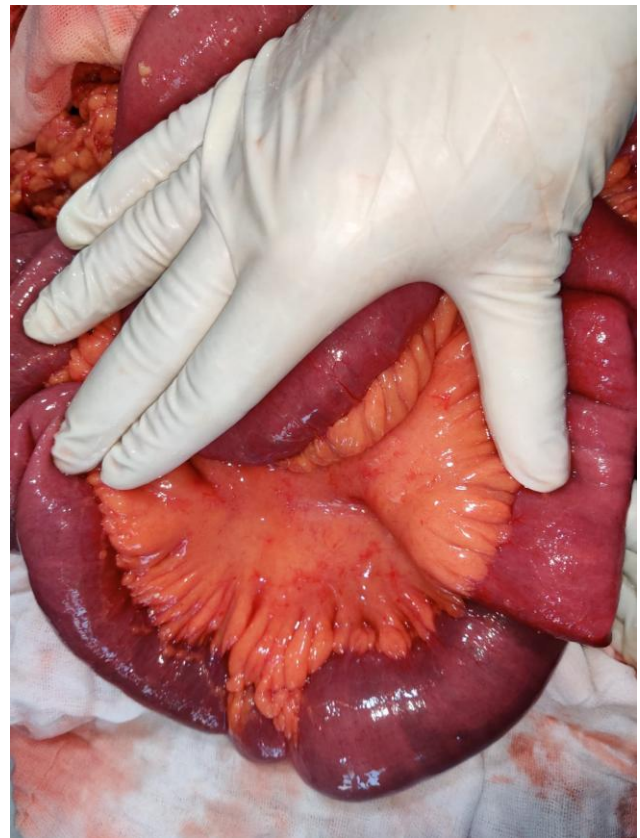
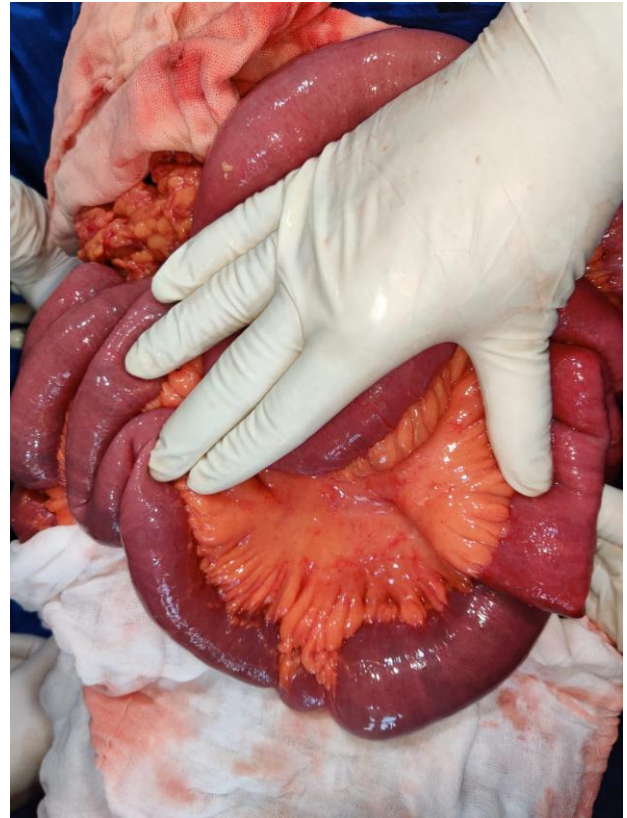
Xray findings were normal

Ultrasound suggestive of colocolic Intussusception with 6.7 cm long bowel loop shows bowel within bowel appearance in right hypochondrium region with evidence of vascularity and few lymphnodes with largest one measures approx 10*7 mm size with echogenic mesentery.

CECT (abdomen+pelvis) suggestive of Polypoidal soft tissue density lesion (approx 36*28mm) in caecum involving ICJ with terminal ileal loop thickening. Terminal ileal loop protruding in caecum. P/o Neoplastic/ Infective etiology with few nodes in RIF largest one approx 12*7mm.

Exploratory Laparotomy with Tranverse abdominal incision was made and on exploration, Ileocolic intussusception with 10 cm long segment involving terminal ileum, caecum, appendix, ascending colon containing 4*4*3 cm³ lump as leading point was identified. Wall of terminal ileum, caecum, ascending colon thickened with multiple enlarged mesenteric lymphnodes. Followed by Resection of Terminal 5 cm ileum, caecum, icj., appendix, ascending colon containing lump with side to side Ileo - ascending isoperistaltic Anastomosis was done in two layers and Accidentally Meckel's diverticulum was identified 30 cm proximal to ICJ and Meckel's Diverticulotomy was done and pelvic drain of 18 Fr was kept and layered closure of abdomen was done. Patient was extubated and immediate post operative period was uneventful. Patient was shifted to surgery ward and sips to liquids oral intake started on POD - 5. drain were removed on POD - 7. Suture line was infected and managed conservatively followed by Secondary closure was done on pod - 21 followed by patient discharged on pod - 24.

Histopatho report suggestive of Lymphoid cells with nuclei and nucleoli. Lymphoid cells are arranged in diffuse sheets and few places in follicles. All layers of Ileocaecal segment involved by tumor. And out 12 lymphnodes no one shows metastasis. suggestive of Non - Hodgkins Lymphoma with Meckel's diverticulum.





2. Discussion

Intussusception is a medical condition in which a part of the intestine folds into the section immediately ahead of it. [1] It typically involves the small bowel and less commonly the large bowel. Symptoms include abdominal pain which may come and go, vomiting, abdominal bloating, and bloody stool. It often results in a small bowel obstruction. Other complications may include peritonitis or bowel perforation.

The condition is more common in children than in adults. [16] It strikes about 2,000 infants (one in every 1,900) in the United States in the first year of life. Its incidence begins to rise at about one to five months of life, peaks at four to nine months of age, and then gradually declines at around 18 months.

Intussusception occurs more frequently in boys than in girls, with a ratio of approximately 3:1.

In adults, intussusception represents the cause of approximately 1% of bowel obstructions and is frequently associated with neoplasm, malignant or otherwise.

The cause in children is typically unknown; in adults a lead point is sometimes present. Risk factors in children include certain infections, diseases like cystic fibrosis, and intestinal polyps. Risk factors in adults include endometriosis, bowel adhesions, and intestinal tumors. Diagnosis is often supported by medical imaging. In children, ultrasound is preferred while in adults a CT scan is preferred.

Intussusception is an emergency requiring rapid treatment. Treatment in children is typically by an enema with surgery used if this is not successful. Dexamethasone may decrease

the risk of another episode. In adults, surgical removal of part of the bowel is more often required. Intussusception occurs more commonly in children than adults. In children, males are more often affected than females. The usual age of occurrence is six to eighteen months old.

Intussusception may become a medical emergency if not treated early, as it eventually causes death if not reduced. In developing countries where medical hospitals are not easily accessible, especially when other problems complicate the intussusception, death becomes almost inevitable. When intussusception or any other severe medical problem is suspected, the person must be taken to a hospital immediately.

The outlook for intussusception is excellent when treated quickly, but when untreated it can lead to death within two to five days. It requires fast treatment, because the longer the intestine segment is prolapsed the longer it goes without bloodflow, and the less effective a non-surgical reduction is. Prolonged intussusception also increases the likelihood of bowel ischemia and necrosis, requiring surgical resection.

Primary Non Hodgkin's Lymphoma of the gastrointestinal tract is the most common extranodal lymphoma [7]. Small and large intestines are the most frequent sites of involvement in the pediatric age group [8]. It is most commonly found in the ileum, where the greatest concentration of gut-associated lymphoid tissue is present. They are commonly derived from B-cells from the lymphoid tissue present in the lamina propria and submucosa. They may be solitary or diffuse; solitary form tends to encircle the bowel and narrow the lumen, diffuse form shows multi-segment involvement with numerous polypoidal excrescences. It may then invade the serosa to mesentery or beyond.

The most common lead point in intussusception has been found to be the Meckel's diverticulum [4-6, 9-11]. Other lead points that have been reported are polyps, duplication cyst, carcinoid, leiomyoma, hemangioma, fibrosarcoma and buried appendectomy stump [5, 6, 10]. It can also occur in association with a diffuse process including Henoch-Schonlein purpura, celiac disease, neutropenic colitis, cystic fibrosis, and Peutz-Jehgers syndrome [12-14]. The incidence of NHL acting as a lead point in intussusception is reported to be as high as 17%, and even higher (more than 50%) in children over 4-6 yrs of age [4, 9, 11].

References

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