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Original Research Paper

General surgery

ADULT INTUSSUSCEPTION : A CASE SERIES

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ABSTRACT

BACKGROUND: Intussusception is uncommon in adults and often manifests as non specific symptoms.It is always associated with lead point.Early diagnosis is necessary. Intussusception takes place when one segment of bowel telescopes into an adjacent bowel segment, causing an obstruction and even intestinal ischemia. This process can lead to multiple complications such as bowel obstruction, bowel necrosis, and sepsis. The disease process is much more common in the pediatric population and uncommon in adults, but when present is likely due to a pathological lead point such as neoplasm. The main causes of intussusception in adults are as follows: carcinomas, polyps, strictures, benign tumors, Meckel's diverticulum, and colonic diverticulum.7 It is estimated that only 5% of all intussusception cases occur in adults, and the diagnosis is often overlooked.

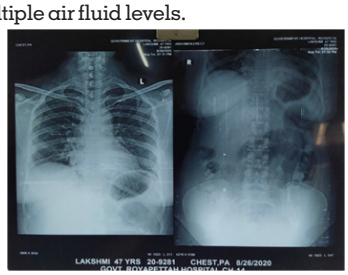
Intussusception in adults is a challenging diagnosis that requires high clinical suspicion. The challenges occur because abdominal pain is not only one of the most common complaints evaluated in the emergency department but generally a nonspecific complaint. Assessment and management of abdominal pain are primarily dependent on the severity of signs and symptoms present during the evaluation. History, physical exam, and lab values can aid in the process, but imaging is usually needed to make the diagnosis. Intussusception is also challenging in adults because it mimics many alternative diagnoses. If not diagnosed properly, it can cause severe complications that can lead to poor patient outcomes. Definitive treatment is surgical intervention, and good patient outcomes depend on timely diagnosis and recruitment of an interprofessional team composed of doctors, nurses, and technicians.

KEYWORDS : Target Sign, Coiled Spring, Obstruction, Sandwich Pattern

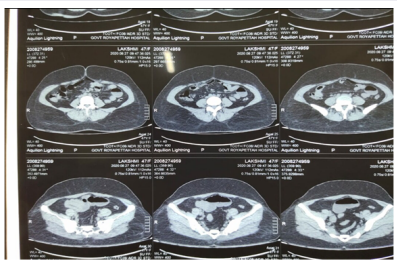
Case Series:

Case 1:

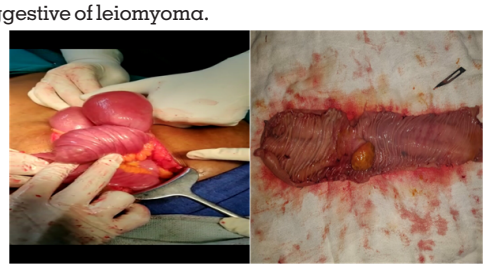
A 45 year old female presented with complaints of abdominal pain and vomiting on and off for past two months. She also had loose stools on and off for past two months. She has no comorbidities. On examination tachycardia was present. Abdomen was diffusely enlarged with tenderness in right iliac fossa and hypogastrium with no guarding. Bowel sounds were found to be increased. Per rectal examination showed collapsed rectum. Ryles tube was bilious. Her routine blood investigations were found to be normal .X ray abdomen showed multiple air fluid levels.



CECT abdomen was then taken which was suggestive of ileoileal intussusception causing obstruction



The patient was then taken for emergency laparotomy. Ileo ileal intussusception was found which was manually reduced . A polypoidal lesion of size 3*3cm was found as leadpoint. Resection and anastomosis of ileum done.Post op HPE suggestive of leiomyoma.

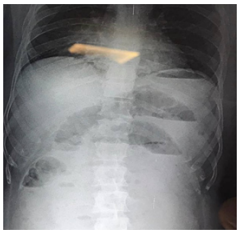


Her post operative period was uneventful.

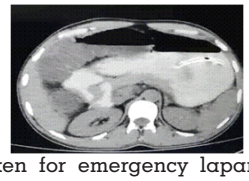
Case 2:

A 41 year old male patient presented with complaints of abdominal pain for 2 days associated with multiple episodes of non-projectile vomiting containing food particles, along with history of abdominal distension and obstipation. He had no comorbidities. On examination vital signs were stable. Diffuse distension of the abdomen was noted. Diffuse tenderness and guarding was present over the abdomen.

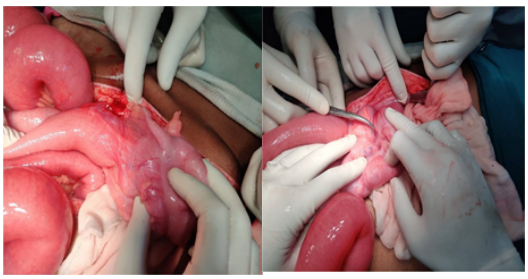
Bowel sounds sluggishly heard. Pre rectal examination revealed collapsed rectum with no fecal staining. His blood investigations showed raised total count. X ray abdomen erect showed multiple air fluid levels.



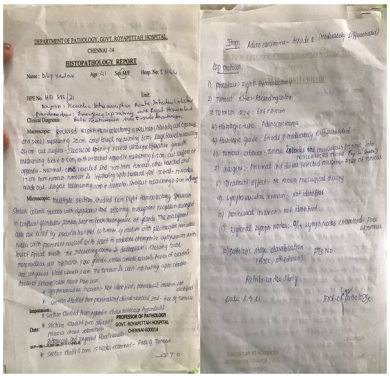
CECT abdomen and pelvis was taken which showed Ileocolic Intususseption causing obstruction.



Patient was taken for emergency laparotomy and intra operatively found to have caecal growth as the lead point of Intususseption. Patient was proceded with Right Hemicolectomy with side to side Ileotransverse anastomosis .



The Histopathology revealed as Moderately differentiated Adenocarcinoma of caecum(6*6*2.5cm)

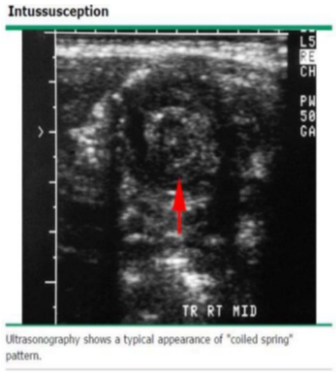


His post operative period was uneventful.

Case 3:

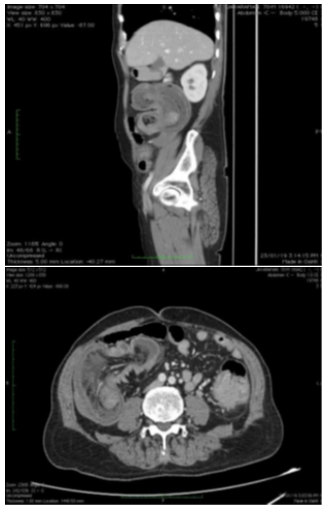
A 32 year old male patient came to Emergency department with complaints of Abdominal pain and abdominal distension for 1 day, vomiting 3 episodes which was bilious, non feculent, non projectile vomiting. Patient had no history of constipation, fever, melena, bleeding PR, UGI bleeding .

Patient had no comorbidities, or no history of previous surgeries. On examination, patient had tachycardia. Abdominal examination revealed a distended abdomen, diffuse tenderness, with guarding. Mass of size 10*10cm is palpable in right Iliac fossa and extending into right lumbar region. Bowel sound was absent. Complete blood count exhibited increased white blood cells of 18,000, with 80% neutrophils and 7% bands. His liver and kidney function tests were within normal limits. A chest x-ray was normal. Ultrasonogram revealed a typical appearance of "coiled spring" pattern.

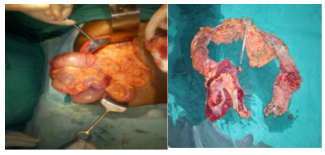


Ultrasonography shows a typical appearance of "coiled spring" pattern.

A computed tomography (CT) scan was taken which showed bowel in bowel, caecal wall thickening, features suggestive of ileo-caecal intussusception .



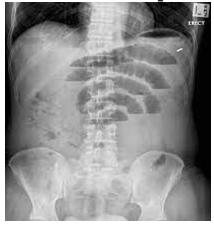
The patient was taken for an exploratory laparotomy, during which ileo-caecal intussusception was found, incidental growth was felt at the sigmoid colon, hence total colectomy was done, and then proceeded with ileo-rectal anastomosis. Post operative HPE was suggestive of Adenocarcinoma.



His post operative period was uneventful

Case 4:

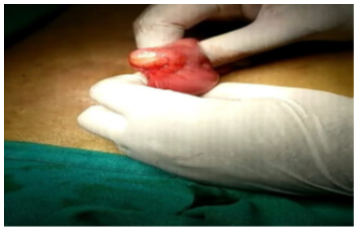
A 28 year old female presented with complaints of abdominal pain and vomiting which was non projectile and bilious for past two days. She also had abdominal distension and obstipation for past 1 day. She had no comorbidities. On examination tachycardia was present. Abdomen was diffusely enlarged with tenderness in right iliac fossa with mild guarding. Bowel sounds were found to be increased. Per rectal examination showed collapsed rectum. Ryles tube was bilious. Her routine blood investigations were found to be normal .X ray abdomen showed multiple air fluid levels.



CECT abdomen was then taken which was suggestive of

ileoileal intussusception causing obstruction.

The patient was taken up for emergency laparotomy. Intra operative finding showed subserosal lipoma in ileum causing intussusception. Resection and anastomosis of that strictured segment done. HPE suggestive of lipoma.



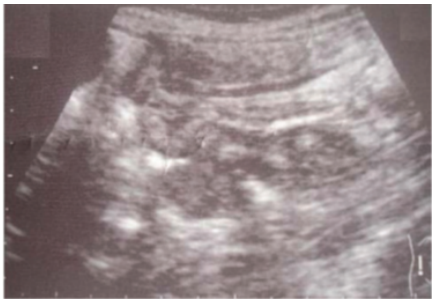
Her post operative period was uneventful.

Case 5:

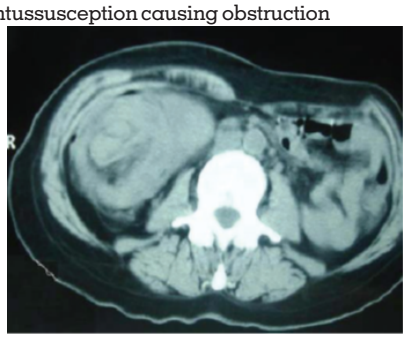
A 37 year old male patient came to Emergency department with complaints of Abdominal pain and abdominal distension for 1 day, vomiting 3 episodes which was bilious, non projectile vomiting. Patient had no history of constipation, fever, melena, bleeding PR, UGI bleeding .

Patient had no comorbidities, or no history of previous surgeries. On examination, patient had tachycardia. Abdominal examination revealed a distended abdomen, diffuse tenderness, no guarding. Mass was palpable in right Iliac fossa. Bowel sound was absent. Complete blood count exhibited increased white blood cells. His liver and kidney function tests were within normal limits. A chest x-ray was normal. Xray abdomen showed multiple air fluid levels.

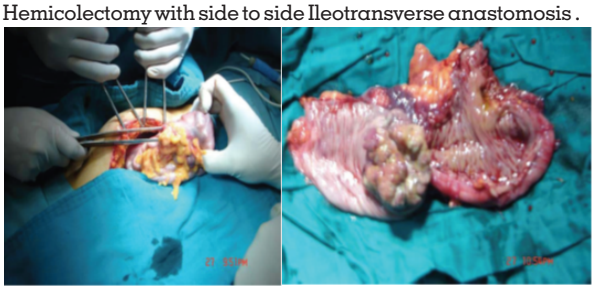
Ultrasonogram revealed a typical appearance of "sandwich" pattern.



CECT abdomen was then taken which was suggestive of ileocolic intussusception causing obstruction



Patient was taken for emergency laparotomy and intra operatively found to have caecal growth as the lead point of Intususseption. Patient was proceded with Right Hemicolectomy with side to side Ileotransverse anastomosis .



The Histopathology revealed as Moderately Mucinous Adenocarcinoma of caecum. Post operative period was uneventful.

CONCLUSION :

The adult intussusception is an uncommon diagnosis, as mentioned. It requires strong clinical suspicion. Delay in management can have severe consequences for the patient. Early diagnosis and treatment are essential to reducing poor patient outcomes. CT imaging is a modality of choice for diagnosis. Emergency Department management focuses on early recognition of the disease process, supportive treatment, and early initiation of interprofessional care. Surgical intervention is the definitive treatment as the majority of cases have a pathological lead point.

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