A rare case of pancreatic heterotopia presenting with intussusceptions

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INTRODUCTION
Heterotopic pancreas also referred to as ectopic pancreas, pancreatic choristoma, or pancreatic rest is defined as the presence of pancreatic tissue in an anomalous location without any anatomic, vascular or neural continuity with the main body of the normal pancreas. HP has been noted in the stomach(23-38%), duodenum(9-36%), jejunum(5-27%), ileum(3-6%), meckel’s diverticulum (2-6.5%). Despite its congenital origin, it remains asymptomatic for long time. A definitive diagnosis is made on histopathological examination in ileum, removed for intussusceptions. We report a case of heterotopic pancreatic tissue of ileum in a 2-yr old girl.

CASE REPORT
The patient was a 2-yr old Indian girl, she was admitted at our hospital, with abdominal distension of 3 days, she was relatively asymptomatic before 3 days. No specific family history was identified, on admission, she had fever with body temperature of 101f, tachycardia with pulse rate 128/min., Respiratory rate 20/min. She was anemic with septicemia.

INVESTIGATIONS
- HB:5.2gm/dl
- TLC:17600 CELLS/MM3
- DLC:N-30 L-67 E-02 M-01
- RBS-102mg/dl
- s.urea-26mg/dl
- s.creatinine-0.9mg/dl
- HIV-nonreactive
- HBSAG-NEGATIVE.

X-RAY ABDOMEN: multiple air-fluid levels suggestive of intestinal obstruction. USG: multiple dilated bowel loops showing sluggish to and fro peristalsis with max diameter 2.8 cm with bowel within bowel target like appearance with edematous inflamed, thickened bowel wall noted at RIF and right lumbar region. Based on these findings, patient was diagnosed with intussusceptions. Patient underwent laparotomy by supraumbilical transverse incision, on exploration

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ABSTRACT
BACKGROUND: Intussusception is relatively common in infants and children. But ectopic pancreatic tissue as a cause is rare. Heterotopic pancreas is defined as pancreatic tissue found outside the usual anatomical location of the pancreas. It is often an incidental finding and can be found at different sites in g.i. tract. In this report we describe a 2-yr-old female child with intussusception caused by heterotopic pancreatic tissue in the ileum. Patient presented with abdominal distension and vomiting since 3 days. Abdominal radiograph showed multiple air fluid levels s/o intestinal obstruction. Abdominal USG s/o sluggish to and fro peristalsis with multiple dilated bowel loops showing target like appearance. Emergency exploratory laparotomy was done. On exploration ileo ileocolic intussusception found with proximal bowel dilated. It was reduced by squeezing 20cm segment of ileum from IC junction found to be normal, beyond this 30 cm segment of ileum found to be necrosed and loss of vascularity, which was resected and sent for histopathological examination. End to end ileocolic anastomosis was done. Sections from resected part showed mural nodule of 32 x 28 mm size, s/o type II pancreatic heterotopia according to heinrich classification. This case reminds us that ileal ectopic pancreas should be included in differential diagnosis of intussusception.

Keywords: Ileocolic intussusception, pancreatic heterotopia, surgery.
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Figure 1: Ileocolic intussusception - approx. 50 cm of terminal ileum goes into caecum

Lead point: Band present leads to twisting of ileal loops. Release of band done with blunt and sharp dissection. Segment reduced by squeezing terminal ileum and caecum. 20 cm from IC junction, ileum found to be normal/healthy. 30 cm of segment of ileum beyond this healthy ileum found to be necrosed, blackened with loss of vascularity.

Figure 2: Gangrenous segment of terminal ileum after reduction

Resection of necrosed segment done with end to end ileoileal anastomosis in double layers. Appendicectomy was done as appendix was mildly inflamed. Ileal loops kept in abdominal cavity. Caecopexy done with abdominal wall. Thorough peritoneal wash given. No evidence of mesenteric lymphadenopathy. Rest of the abdominal organs were normal. 24 no. abdominal drain kept in pelvic cavity. Peritoneum was closed sheath closure done and subcuticular stitches were taken.

Figure 3: The resected segment of ileum showed oval shaped nodule of size 32x28 mm covered with normal ileal mucosa and no ulcer or erosion was seen on mucosal surface.

Histologically, the nodular area was distributed from mucosa, sub mucosa up to muscularis layer. It was composed of ectopic pancreatic tissue containing few acini and ducts with few endocrine elements – incomplete arrangement suggesting von heinrich type 2 ectopic pancreas. The post operative course was uneventful. As a result of the treatment, patient’s abdominal distension was resolved. Passes stools drain removed on 7th postoperative day, got discharged on 10th postoperative day.

CONCLUSION

In conclusion, we have reported a very rare case of ileal ectopic pancreas that led to ileocolic intussusceptions. Thus it is necessary to be aware that ileal ectopic pancreas may cause ileocolic intussusceptions even though chances are rare. Ectopic pancreas in the small intestine is rarely fatal, remains benign and patients remain asymptomatic in their lives except when bleeding, bowel intussusceptions, obstruction or pancreatitis occurs. Therefore it is likely that there are patients with latent small bowel ectopic pancreas which may be incidentally discovered in the future by advanced imaging techniques such as CT, MRI, capsule endoscopy and double balloon enteroscopy.

Key Message: Ileal heterotopic pancreas is a rare cause of intussusceptions at any age it is often an incidental finding and is usually not evident clinically. Hence, careful examination of the lead point of intussusception in resection specimens is mandatory to delineate underlying etiology of these cases.

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