VOLUME - 10, ISSUE - 11, NOVEMBER - 2021 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper

General Surgery

# A RARE CASE OF HETEROTOPIC PANCREATIC TISSUE CAUSING SMALL BOWEL OBSTRUCTION

| | |
|---|---|
| **Dr. B. Santhi** | MBBS, MS (General Surgery), DGO, Professor and Head of the Department, Department of General Surgery, Government Kilpauk Medical College, Chennai-600010 |
| **Dr. M. Annapoorani** | MBBS, MS (General Surgery), Assistant Professor, Department of General Surgery, Government Kilpauk Medical College, Chennai-600010 |
| **Dr. Sharada bhavana** | MBBS, Postgraduate in General Surgery, Department of General Surgery, Government Kilpauk Medical College, Chennai-600010 |

**ABSTRACT**

A Rare case of heterotopic pancreatic tissue of ileum causing acute intestinal obstruction has been described with a brief review of literature. A 42 yr old male patient presented to the emergency department with features of acute intestinal obstruction. After evaluation patient was taken up for emergency laparotomy which revealed a band to be arising from ileum. Furthermore, there was a small growth in the ileal wall at the site of origin of the band. Hence resection of the growth was done and followed by ileoileal anastomosis. Later on, histopathological examination of the growth revealed it to be heterotopic pancreatic tissue.

Heterotopic pancreatic tissue is often an incidental finding encountered in upper gastrointestinal tract during endoscopy and surgeries. But Symptomatic ectopic pancreas of ileum is relatively rare and they very rarely present with acute symptoms as in this case

**KEYWORDS :**

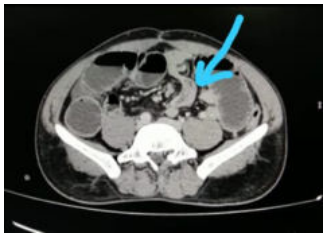
## INTRODUCTION:

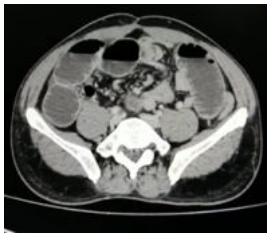
Heterotopic pancreas is a congenital anomaly in which pancreatic tissue is anatomically separate from the main gland and often without vascular or ductal continuity. It is variably referred to as ectopic, aberrant, or accessory pancreas, as well as pancreatic choristoma or adenomyoma. Although Heterotopic pancreas can be found throughout the entire gastrointestinal tract. It is most commonly found in the upper gastrointestinal tract stomach (25–38%), duodenum (17–36%), and jejunum (15–21%). It is rarely found in ileum (1-2%), biliary tract, gall bladder, lungs etc. Despite the fact that heterotopic pancreatic tissue is relatively common they are usually asymptomatic and are only incidental findings. Resection followed by histopathological examination is essential for confirmation of diagnosis.

### Case Study:

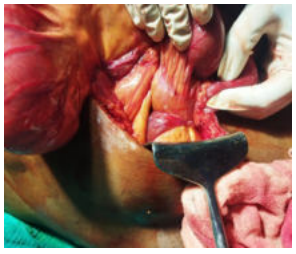
A 42-year-old male presented to casualty with complaints of abdomen pain and abdomen distension for 2 days. He had history of vomiting 2 episodes, obstipation for 2 days. Upon examination he had tachycardia and his abdomen was distended with diffuse tenderness and guarding. His blood values were found to be within normal limits.

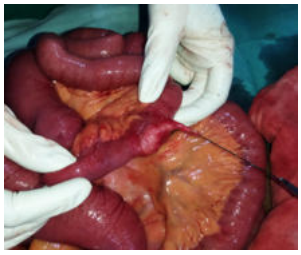
Ultrasound abdomen showed dilated bowel loops and CECT abdomen revealed features of acute intestinal obstruction with transition point in the mid ileum. A wall thickening was found near the transition point, and dilated bowel loops proximal to it.

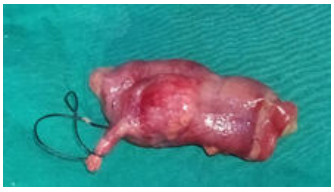




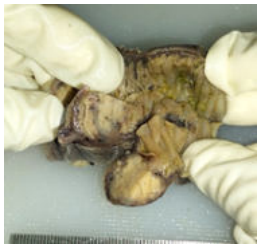
Patient was planned for emergency laparotomy and intraoperatively patient had multiple adhesion between bowel and omentum and dense interbowel adhesions as well. Finally, a band was found between ileum and the lateral abdomen wall bowel loops proximal to it were dilated and distal to it collapsed. Adhesiolysis was done and band was released. The band was found to be arising from a small growth in the ileal wall. Hence resection of the growth along with a part of the ileum was done followed by ileoileal end to end anastomosis. Rest of the bowel was found to be normal and the Meckel's diverticulum was also found to be broad based and normal.

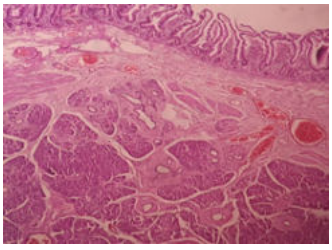






Post operatively, Histopathological examination revealed a small nodule in the wall of ileum containing heterotopic pancreatic tissue. The heterotopic pancreatic tissue was confined within the wall and mucosa and serosa were intact.





## DISCUSSION:

Ectopic pancreatic tissue is an aberrant focus of normally developed pancreatic tissue that lacks anatomic and vascular

continuity with the main organ and can be found in various locations. Autopsy studies have revealed that ectopic pancreatic tissues are fairly common (1-13%) but their clinical manifestations are very rare. Most ectopic pancreatic tissue are found in the upper gastrointestinal tract stomach, duodenum and Meckel's diverticulum. Rarer sites include small intestine liver, spleen and biliary tree. They are asymptomatic and identified during surgery or endoscopy. When they present, they with symptoms due to the innate pancreatic tissue and other due to its effect on surrounding structures. Usually symptoms are due to local compression, obstruction, ulceration, upper GI bleeding and most commonly intussusception. Other symptoms may be due to pancreatic tissue inflammation or malignant transformation.

**Classification:**

Histological classification includes

**Table 1.** Heinrich classification of ectopic pancreas [9, 12].

| | |
|---|---|
| **Type 1** | Ectopic tissue with acini, ducts and islets of Langerhans. |
| **Type 2** | Ectopic tissue with incomplete or lobular arrangement (only a few acini and multiple ducts). Endocrine elements are absent. |
| **Type 3** | Ectopic tissue of proliferating ducts (so-called adenomyoma). Both exocrine acini and endocrine elements are lacking. |

**Heterotopic Pancreas Is Found In The**

1. submucosal layer of the bowel wall in 54% of cases,
2. spans the submucosa and muscularis propria in 23% of cases,
3. located in the muscularis propria in 8% of cases
4. located in the subserosa in 11% of cases
5. involves the entire wall in 4% of case

In this case discussed the pancreatic tissue was found till muscularis propria and contains acini, ducts and islets of Langerhans.

**Management**– usually when the ectopic pancreatic tissue is identified intraoperatively resection and anastomosis is done. If they are identified during endoscopy or in imaging then submucosal resection can be attempted only if they are located in the submucosal plane.

**CONCLUSION:**

This case is a rare case of ectopic pancreatic tissue of ileum presenting with acute intestinal obstruction due to a constriction band arising from growth hence resection and anastomosis was done. Post operatively histological examination revealed the tumor to be ectopic pancreatic tissue involving muscularis propria with both acinar and ductal components.

**REFERENCES:**


1. Straatman J, Meester RJ, van Grieken NCT, et al. Clinical picture: multiple sites of ectopic pancreatic tissue. *Springerplus* 2015;4:293.
2. THE PANCREAS -an integrated yextbook of basic science , medicine and surgery 3rd edition by Hans G.Berger MD,FACS (Hon)
3. Hamada Y, Yonekura Y, Tanano A, Takada K, Kato Y, Sato M, Sakaida N, Okamura A, Hioki K.Eur J Pediatr Surg. 2000 Jun;10
   Isolated heterotopic pancreas causing intussusception.
4. P, Grundfest S, Carey W, Weiss R.Surgery. 1981 Jul; Pancreatic heterotopia--a rare cause of bowel obstruction.Anseline.
5. Aslan S, Nural MS.Turk J Gastroenterol. 2019 Feb;30, CT features of asymptomatic heterotopic pancreas in jejunal mesentery.
6. C.P. Armstrong, P.M. King, J.M. Dixon, I.B. Macleod. The clinical significance of heterotopic pancreas in the gastrointestinal tract. Br J Surg, 68 (1981),
7. Y. Zhang, X. Sun, J.S. Gold, Q. Sun, Y. Lv, Q. Li, . Heterotopic pancreas: a clinicopathological study of 184 cases from a single high-volume medical center in China. 55 (2016)