

ECTOPIC PANCREATIC TISSUE IN A LEAD POINT IN ILEOCAECOCOLIC INTUSSUSCEPTION IN A YOUNG ADULT: A CASE REPORT

Sharath Rajkumar¹, Himagirish Rao², Ilaveyini Sathiaseelan³, Mohanaa Nithilaa⁴

¹Post Graduate Resident, Department of General Surgery, Pondicherry Institute of Medical Sciences, Puducherry.

²Assistant Professor, Department of General Surgery, Pondicherry Institute of Medical Sciences, Puducherry.

³House Surgeon, Department of General Surgery, Pondicherry Institute of Medical Sciences, Puducherry.

⁴House Surgeon, Department of General Surgery, Pondicherry Institute of Medical Sciences, Puducherry.

ABSTRACT

Meckel's diverticulum as a cause of intussusception is not a rare diagnosis, ectopic pancreatic tissue in a Meckel's diverticulum is also not a rare diagnosis; however, ectopic pancreatic tissue as a nodule in the lead point in causing intussusception is rare. Here, we discuss an interesting case of ileocolic intussusception with ectopic pancreatic tissue as the lead point in a young adult.

KEYWORDS

Intussusception, Ectopic.

HOW TO CITE THIS ARTICLE: Rajkumar S, Rao H, Sathiaseelan I, et al. Ectopic pancreatic tissue in a lead point in ileocaecocolic intussusception in a young adult: A case report. J. Evid. Based Med. Healthc. 2016; 3(47), 2385-2387.

DOI: 10.18410/jebmh/2016/525

INTRODUCTION: Intussusception of the bowel is defined as the telescoping of a proximal segment of the gastrointestinal tract within the lumen of the adjacent segment. Intussusception is the leading cause of obstruction in the young child. Adult intussusception represents 5% of all cases of intussusception and accounts for only 1%-5% of intestinal obstructions in adults.¹ In contrast to intussusceptions in children, a demonstrable aetiology is found in 70% to 90% of the cases in the adult population.^{2,3}

Due to a significant risk of associated malignancy, which approximates 65%, 70 to 90% of adult cases of intussusception require definite treatment, of which surgical resection is most often the treatment of choice.¹ The preoperative diagnosis of intussusception is infrequent in the adult population. The majority of patients are brought to the operating room with the preoperative diagnosis of bowel obstruction.⁴ In adults, more commonly large bowel intussusception tends to occur.

Meckel's diverticulum as a cause of intussusception is not a rare diagnosis, ectopic pancreatic tissue in a Meckel's diverticulum is also not a rare diagnosis⁵; however, ectopic pancreatic tissue as a nodule in the lead point in causing intussusception is rare. Here, we discuss an interesting case of ileocolic intussusception with ectopic pancreatic tissue as the lead point.

CASE REPORT: A 19-year-old male was brought to the casualty with a 4-day history of vomiting and constipation for 2 days, vomitus was yellowish coloured and contained food particles.

Financial or Other, Competing Interest: None.
Submission 15-05-2016, Peer Review 23-05-2016,
Acceptance 30-05-2016, Published 13-06-2016.

Corresponding Author:

Dr. Sharath Rajkumar,
Room No. 203, 2nd Floor, PG Annex,
Pondicherry Institutes of Medical Sciences,
Kalathu Mettu Pathai, Ganapathichettikulam,
Village No. 20, Kalapet, Puducherry-605014.

E-mail: sharathrajkumar@live.com

DOI: 10.18410/jebmh/2016/525

He gave history of vague abdominal pain around the umbilicus which was gradually worsening over the last month. There was no radiation of pain or any other associated symptoms in the last one month. He had blood transfusion for anaemia 3 months ago. He underwent laparoscopic appendectomy one and a half years back.

On physical examination, he was anaemic. His abdominal examination was essentially normal apart from mild tenderness in his epigastric region. Digital rectal examination revealed empty rectum with no faecal or blood staining. On further evaluation, ultrasound of the abdomen showed dilated bowel loops, bowel wall thickening in the right iliac fossa with features suggestive of intussusception. Intraoperatively, it was an ileocaecocolic intussusception, manual reduction was attempted. Major part of the intussusceptum was reduced, the leading point was the ileum which was gangrenous and had a nodule. Gangrenous segment of the ileum was resected and primary anastomosis was done. Resected segment was sent for histopathological examination. Histopathological examination was suggestive of ectopic pancreatic tissue in the nodule.



Fig. 1: Pre-Operative Picture Showing Intussusception



Fig. 1: Manual Reduction

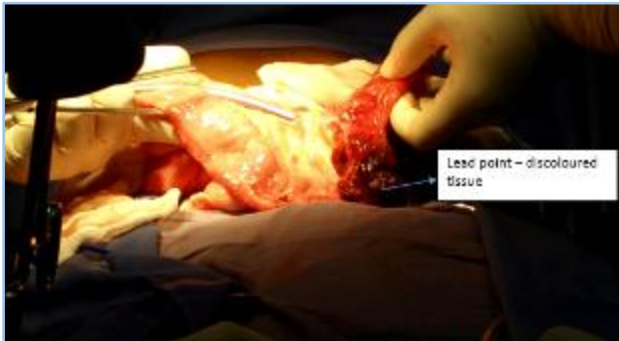


Fig. 3: After Reduction



Fig. 4: Excised Specimen

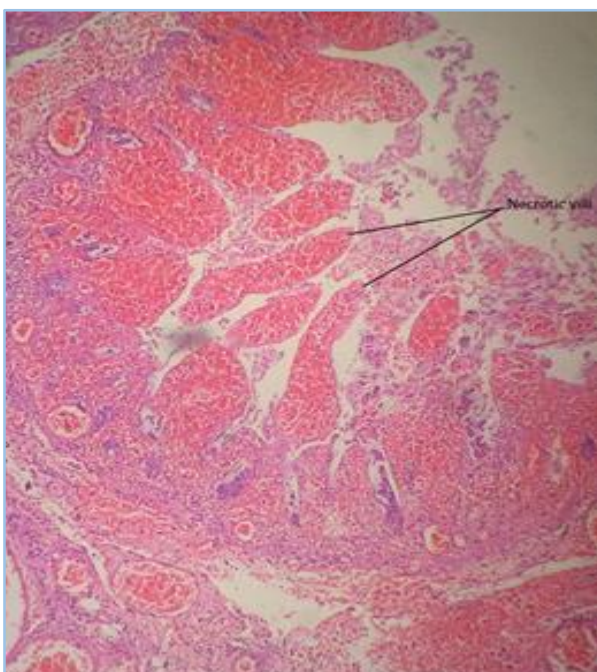


Fig. 5: Histopathology

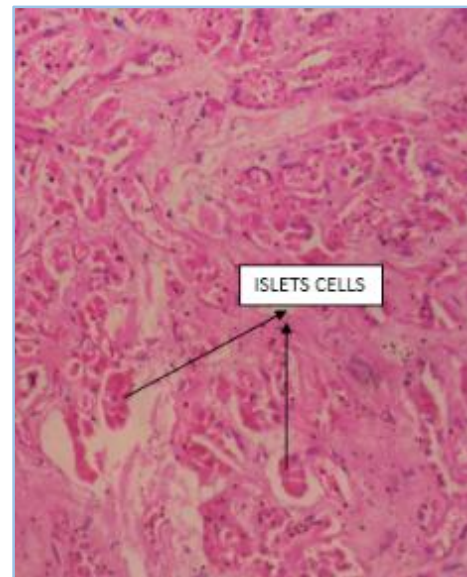


Fig. 6: Histopathology-Islets Cell

DISCUSSION: Adult intussusception is relatively rare (5% of all intussusception) the remaining 95% occur in children. The clinical symptoms are vague in adults.⁶ Occurs in only 15%–20%. It is usually associated with neoplasms, of which up to 77% are malignant⁵. The most common colon cancer is primary adenocarcinoma. Leiomyosarcoma, lymphoma, and metastases as lead points have also been reported.² In the small intestine, an intussusception can be secondary either to the presence of intra- or extraluminal lesions (Inflammatory lesions, Meckel’s diverticulum, postoperative adhesions, lipoma, adenomatous polyps, lymphoma and metastases) or iatrogenic, e.g. due to the presence of an intestinal tube.⁷ or even in patients with a gastrojejunostomy.⁷ Malignancy (Adenocarcinoma) accounts for up to 30% of cases of intussusception occurring in the small intestine.⁸

Ectopic pancreas is defined as the presence of pancreatic tissue lacking anatomical and vascular continuity with the pancreas.¹ As stated by Hunt and Bonesteel,⁹ the first case of heterotopic pancreas was reported by Schultz in 1729 and histopathological confirmation was by Klob.¹⁰ The reported incidence in autopsy studies is 0.5-13%.¹¹ The aetiology is unknown. The proposed theory is that during rotation of foregut in a foetus and fusion of dorsal and ventral parts of pancreas, small islands of pancreas are carried away and continue to develop at its aberrant location.⁴

Diagnosis of an ectopic pancreas is difficult preoperatively. The history and clinical features in adult population is vague. Some adults will present as intestinal obstruction requiring emergency surgery. Unlike children, intussusception in adults require a surgical intervention as discussed previously. Adult intussusception almost always has a cause. Radiologically CT was found to be the most sensitive diagnostic tool.³ When an ectopic pancreas is found incidentally during surgery for other abdominal conditions, resection should be considered because of the risk of late clinical problems.

This disease occasionally develops symptoms such as bleeding, vomiting or abdominal pain due to pancreatitis. The preoperative imaging studies (ultrasonography, endoscopic ultrasonography and computerised tomography) are not very specific¹². Hence, in the majority of cases, the diagnosis is made by histological evaluation following resection of a symptomatic or suspicious lesion.¹² When symptomatic or suspicious, the lesion should be resected. The management of asymptomatic, histologically verified heterotopic pancreas or those found incidentally during other surgery is under debate. Some authors recommend resection in these asymptomatic cases to prevent later complications.

CONCLUSION: Here, we have reported a rare case ileocolic intussusception with ectopic pancreatic tissue presenting as a nodule which in turn was the leading point. Such a diagnosis must be considered when the patient presents with chronic abdominal pain. Once such a diagnosis is made, resection and anastomosis is mandatory to prevent complications in the future.

REFERENCES

1. Azar T, Berger DL. Adult intussusception. *Ann Surg* 1997;226(2):134-138.
2. Amal Bousseaden, Rajae Afifi, Wafae Essamri, et al. Adult colocolic intussusception diagnosed by ultrasonography: a case report. *Journal of Medical Case Reports* 2011;5:294.
3. Bunyamin Gurbulak, Esin Kabul, Cem Dural, et al. Heterotopic pancreas as a leading point for small-bowel intussusception in a pregnant woman. *J Pancreas* 2007;8(5):584-587.
4. Yalamarthi S, Smith RC. Adult intussusception: case reports and review of literature. *Postgrad Med J* 2005;81(953):174-177.
5. Shoji Hirasaki, Motoharu Kubo, Atsushi Inoue, et al. Jejunal small ectopic pancreas developing into jejunojejunal intussusception: a rare cause of ileus. *World J Gastroenterol* 2009;15(31):3954-3956.
6. Martin-Lorenzo JG, Torralba-Martinez A, Liron-Ruiz R, et al. Intestinal invagination in adults: preoperative diagnosis and management. *Int J Colorectal Dis* 2004;19(1):68-72.
7. Marini A, Yiallourou A, Samanides L, et al. Intussusception of the bowel in adults: a review. *World J Gastroenterol* 2009;15(4):407-411.
8. Heinrich H. The histology of a contributory tissue. Accessory pancreas. *Virchows Arch Pathol Anat* 1909;198:392-401.
9. Hunt VC, Bonesteel HTS. Meckel's diverticulum containing aberrant pancreas. *Arch Surg* 1934;28(3):425-439.
10. Klob J. Pancreas accessorium. *Zeitschrift der Kaiserl Königl Gesellschaft der Aerzte zu Wien* 1859;15:732.
11. Gokhale UA, Nanda A, Pillai R, et al. Heterotopic pancreas in the stomach: a case report and brief review of the Literature. *J Pediatr* 2010;11(3):255-257.
12. Liu YM, Shen HP, Li X, et al. Heterotopic pancreas: a clinical analysis of nine patients and review of literature. *Am Surg* 2012;78(3):E141-143.