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Research Paper

lipoma complicated with an ectopic pancreatic tissue as a rare cause of intussusception in adults: A case report

Dr Ranil Jayasena[1] (MBBS, MS, FRCS), Dr (Mrs) M J Fernando[2] (MBBS, Dpath MD (Histopathology))
Dr Rahmathullah M N[3](MBBS, Master in Surgery), Dr D.Keshini[4] (MBBS)
1- Consultant General Surgeon, Lanka Hospitals, Colombo, Sri Lanka
2- Consultant Histopathologist, Lanka Hospitals, Colombo, Sri Lanka
3,4- Surgical department, Lanka Hospitals, Colombo, Sri Lanka

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I. INTRODUCTION

Intussusception is not frequently seen in adults, but common in children (1). Intussusception in adults can be a serious problem, unlike in the children. The cause of intussusceptions in adults could be tumour, surgery related or heterotopic tissue. Benign or malignant tumors are among the most common causes in adults for intussusceptions to occur. Heterotopic tissue is defined as the tissue seen outside their usual location without adequate, or no vascular or anatomical continuity with the tissue origin. Most of the time heterotopic panreas and heterotopic gastric mucosa seen in the Gastro intestinal tract. Ectopic pancreatic tissue usually found incidentally and generally causes no symptoms unless troubles caused by inflammation, obstruction, etc (2). Intussusception is seen when a segment of the bowel telescope Into the adjacent bowel segment, which leads to bowel obstruction and intestinal ischemia. Adults Intussusception accounts for about 5% off all cases of intussusceptions and 1 to 5% of intestinal obstruction in adults. (3).

Our case is unique as we report a case of adult intussusception resulted from a lipoma with ectopic pancreatic tissue, forming a polyp complicated with ileo ileal intussusception.

II. CASE PRESENTATION

A 32 year old woman had recurrent abdominal pain since December 2023. The pain was intermittent and relieving on its own but this time presented to the emergency department with worsening, abdominal pain and vomiting, and the pain was more concentrated on the left lower quadrant. During the first episode, she was managed conservatively as small bowel obstruction and discharged from the hospital however, due to recurrent similar symptoms, which is persistent we prompted the patient to present to Emergency department for definitive management. No history of constipation or diarrhoea. Her previous medical and surgical history was unremarkable. No family history of similar bowel obstructive symptoms and no Childhood history of intussusception. On admission, the patient didn't complain of fever and had stable vital signs. On physical examination her abdomen was distended and tender on palpation, mostly seen at the right lower quadrant of the abdomen. Complete blood count, inflammatory markers and complete metabolic panel were all within normal limits. As the patient got similar pain again, given previous CT findings which showed ileo-ileal intussusception but at that time patient was managed conservatively (figure 1). As a result Barium meal and follow through Study was performed, the report came in as normal with no evidence of small bowel obstruction as the contrast medium has reached the colon in one hour. (Figure2).

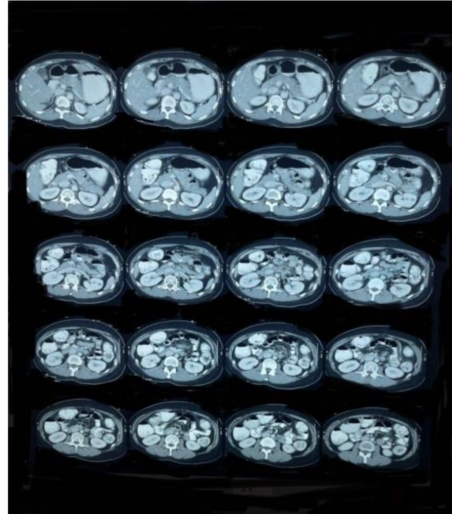

Figure-1- CT IMAGE SHOWING THE INTUSSSUCEPTION

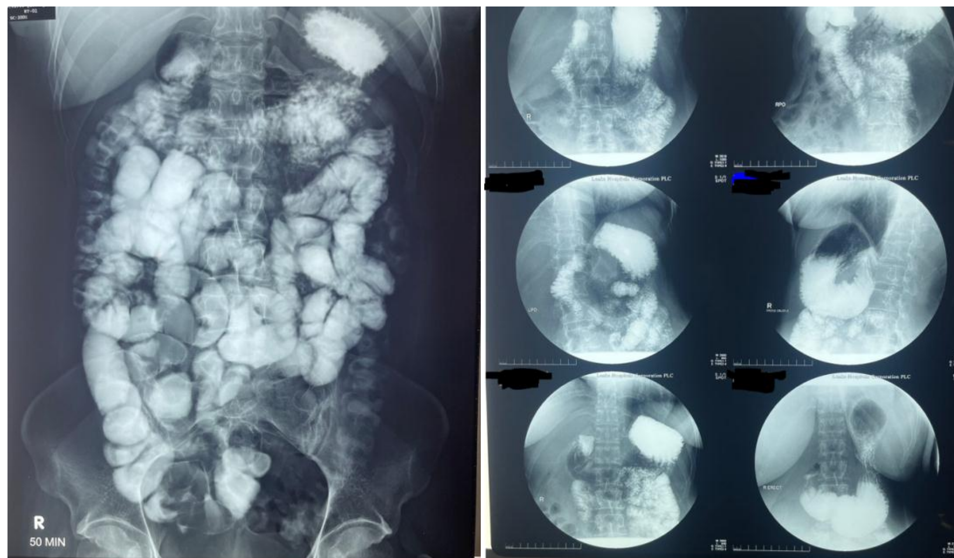

Figure -2- Barium meal study

TREATMENT

Given the above symptoms and previous CT findings with normal, Barium meal study, it was decided to prepare the patient for emergency explorative laparotomy as tender mass noted in the right iliac fossa. Initial inspection showed obvious intussusception with a tight neck in the mid ileum. Bluish mucosa was noted in the distal part (intussuscipient), Manuel reductions was attempted, but failed due to its tight neck, therefore, we decided to resect the obstructed part and ileo- ileal end to end anastomosis was done. The resected specimen was explored and found to have yellowish well defined nodular lesion 50mm From the 30mm resected margin and the cut surface shows a yellow colour lesion measuring 10 x 10 MM in diameter. (figure3-4). Subsequently specimen was sent for histopathological examination.

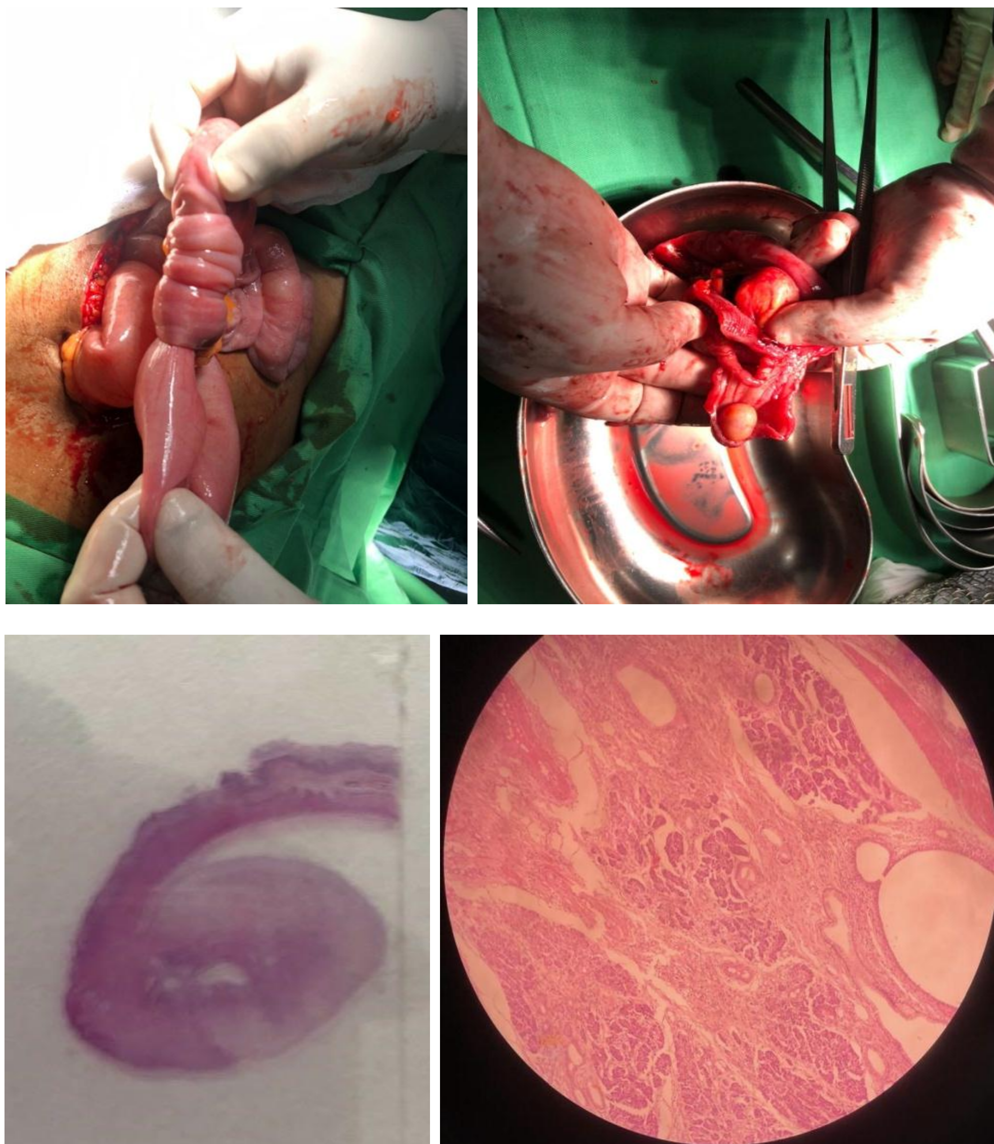

Figure -3,4 - Intraoperative finding and histological finding

FOLLOW UP

Histopathological examination revealed that section from ileum exhibit a polyp with surface mucosal ulceration. Underneath tissue showed dilated ducts lined by tall columnar epithelium Surrounded by clusters of ectopic, pancreatic tissue within Lamina propria and muscularis propria, these ectopic tissue is embedded in adipose tissue. Therefore, it was concluded that the appearance is compatible with a lipoma with ectopic pancreatic tissue forming a polyp. There was no evidence of malignancy.

III. DISCUSSION

Intussusception is a type of intestinal obstruction, causing obstructive sign as symptoms (4) intussusception can be divided into primary and secondary and more than 90% of primary intussusception occurs in infants and 10% in adults. There are multiple causes of intussusception and its diverse, which includes intestinal amoebiasis, ulcerative colitis, intestinal polyps, meckel's diverticulum, lymphadenitis in children, colon cancer and some benign tumors, such as lipoma (5, 6, 7, 8). This case is one of the rarest case as there are no any cases has been reported according to these findings, but similar to this case, another case report has been published by Jin et al (9) as intussusception caused by paraduodenal hernia. Chaudhary et al (10) described a case of intusussception by primary Lipoma of colon.

To the best of our knowledge, we believe that there are no existing cases documenting ileal ileo intussusception in adults secondary to ectopic tissue complicated with lipoma. A Case report published by Calin McCarthy et al 2023 reported jejunal intussusception secondary to pancreatic and gastric heteroptopia (11).

Most of the time heterotopic pancreatic tissue found in gastric antrum (12) and heterotropic gastric mucosa is found in proximal esophagus (13). Therefore Ileum is an unlikely presenting location for ectopic pancreatic tissue. Few similar cases exist documenting case of adult intussusceptions due to pancreatic and gastric heterotopia causing small bowel obstruction (14). Due to specific presentation of symptoms, intussuception in adults becomes a challenging diagnosis as it mimics alternative diagnosis (15) treatment of adult intussusception may depend on the presence of lead point. If no lead point, spontaneous resolution of intussusception is possible, and no risk of developing bowel ischemia or necrosis, but if lead point is demonstrable, it results in obstruction and requires surgical intervention as demonstrated in our case as ectopic pancreatic tissue was the lead of obstruction.

Daniel et al, 2021 reported a case of adult inception similar to our case as the cause of intussuception in their case was due to heterotopic pancreatic tissue in the jejunum (16). It is extremely rare for heterotopic, pancreas to cause intestinal obstruction or intussuception, and if it causes obstruction, it may serve as the lead point for intussuception. (17). None of the imaging modalities are diagnostic for diagnosing heterotropic pancreas (18) therefore, surgical resection is always needed to confirm the diagnosis and to provide further histological details (19).

REFERENCES

[1]. Honjo H, Mike M, Kusanagi H, Kano N. Adult intussusception: a retrospective review. World J Surg 2015; 39: 134-138 [PMID: 25192846 DOI: 10.1007/s00268-014-2759-9]

[2]. Weilbaecher D, Bolin JA, Hearn D, Ogden W 2nd. Intussusception in adults. Review of 160 cases. Am J Surg 1971; 121: 531-535 [PMID: 5557762 DOI: 10.1016/0002-9610(71)90133-4]

[3]. Brayton D, Norris WJ. Intussusception in adults. Am J Surg 1954; 88: 32-43 [PMID: 13158719 DOI:10.1016/0002-9610(54)90328-1]

[4]. Martin P, Sklow B, Adler DG. Large colonic lipoma mimicking colon cancer and causing colonic intussusception. Dig Dis Sci 2008; 53: 2826-2827 [PMID: 18270829 DOI: 10.1007/s10620-008-0202-5]

[5]. Azar T, Berger DL. Adult intussusception. Ann Surg 1997; 226: 134-138 [PMID: 9296505 DOI: 10.1097/00000658-199708000-00003]

[6]. Steer D, Clarke DL, Buccimazza I, Thomson SR. An unusual complication of intestinal amoebiasis. S Afr Med J 2005; 95: 845 [PMID: 16344879]

[7]. Lim CJ, Chen JH, Chen WL, Shen YS, Huang CC. Jejunojejunum intussusception as the single initial manifestation of Henoch-Schönlein purpura in a teenager. Am J Emerg Med 2012; 30: 2085.e1-2085.e3 [PMID: 22306398 DOI: 10.1016/j.ajem.2011.12.003]

[8]. Ye W, Lu B, Liu H. A Rare Cause of Multiple Intestinal Mass Lesions. Gastroenterology 2016; 150: 570-571 [PMID: 26829304 DOI: 10.1053/j.gastro.2015.11.052]

[9]. Jin C, Mo J, Wang G, Jiang H, Feng Y, Wang S. Paraduodenal hernia complicated with intussusception: case report. BMC Surg 2018; 18: 120 [PMID: 30577799 DOI: 10.1186/s12893-018-0460-x]

[10]. Chaudhary A, Arora R, Sharma A, Aggarwal S, Safaya R, Sharma S. Primary colonic liposarcoma causing colo-colic intusussception: a case report and review of literature. J Gastrointest Cancer 2007; 38: 160-163 [PMID: 18972225 DOI: 10.1007/s12029-008-9031-1]

[11]. Caline McCarthy, MS, Amendha Ware, APRN, FNP-BC, Jay A. Redan, MD . DOI:10.4293/CRSLS.2023.00018. July–September 2023 Volume 10 Issue 3 e2023.00018

[12]. Chandan VS, Wang W. Pancreatic heterotopia in the gastric antrum. Arch Pathol Lab Med. 2004;128(1):111–112.

[13]. Murshed KA, Khawar M, Petkar M. Heterotopic gastric mucosa in the ileum: a rare cause for intussusception in adults. Case Rep Gastroenterol. 2020;14(3):609–614.

[14]. Alfreijat M, et al. A mass of pancreatic and gastric heterotopia causing a small bowel obstruction in a 61-year-old male. Case Rep Gastrointest Med. 2017;2017:3126108.

[15]. Matulich J, Thurston K, Galvan D, Misra S. A case of carcinoid likely causing jejuna intussusception. Case Rep Surg. 2014;2014:949020.

[16]. Daniel N E, Rampersad F S, Naraynsingh V, et al. (April 20, 2021) Jejunal Intussusception Due to Heterotopic Pancreas: A Case Report. Cureus 13(4): e14586. DOI 10.7759/cureus.14586

[17]. Tekin A, Aksoy F, Vatansev C, Kücükkartallar T, Belviranli M, Toy H: A rare cause of ileus: invagination due to ectopic pancreas. Acta Chir Belg. 2008, 108:343-5. 10.1080/00015458.2008.11680235

[18]. Rezvani M, Menias C, Sandrasegaran K, Olpin JD, Elsayes KM, Shaaban AM: Heterotopic pancreas: histopathologic features, imaging findings, and complications. Radiographics. 2017, 37:484-99.

[19]. Sathyanarayana SA, Deutsch GB, Bajaj J, et al.: Ectopic pancreas: a diagnostic dilemma . Int J Angiol. 2012, 21:177-80. 10.1055/s-0032-1325119