

CASE REPORT

Unusual presentation of Carcinoid tumor in pregnancy as Ileo-Ileo caecocolic intussusception

Mohan Patro, Farag M Mikael

Dr. Mohan Patro, MBBS, MS, FICA, FCCP, Dc Uro., Dc Plastic.,
Asso. Professor in surgery & Laparoscopic surgeon,

Dr. Farag M Mikael, MD, PhD,
Prof. & HOD of Surgery,

Faculty of Medicine, Omar El Mukhtar University, El Beida, Libya.
El Thowra Teaching hospital, El Beida, Libya

E-mail: drmohanpatro@gmail.com

Abstract

Carcinoid tumours are rarely associated with pregnancy. Very few cases have been documented in the literature, mostly affecting appendix. Ileal Carcinoids are extremely rare in pregnancy. Bony metastasis is also rare. Intestinal obstruction occurring during pregnancy is rare. Intussusception in pregnancy is still rarer and making preoperative diagnosis is extremely difficult and possesses therapeutic challenge. Hence, we report a case of multiple ileal Carcinoid tumours, in a 22 weeks pregnant woman, presented as acute abdomen with Ileo-Ileo caecocolic intussusception, with gangrenous ileal segment; and bony metastasis over back of the chest ; was operated successfully. **Copyright © acascipub.com, all rights reserved.**

Key words: Pregnancy, Carcinoid tumor of Ileum, Ileo-Ileo caecocolic intussusception , Intestinal obstruction.

Introduction

Gastrointestinal cancers may be hard to detect in pregnant women, more so Carcinoid tumours; specially of ileum is extremely rare . Few cases are documented about association of Carcinoid tumor of appendix with pregnancy [1,2]. Acute presentation of Carcinoid tumor is often associated with intussusception [3]. Incidence of Intestinal obstruction in pregnancy varies between 1:2500-3500 [4]. Intestinal obstruction in pregnancy is a rare surgical emergency; associated with a high maternal and perinatal mortality of 6% and 26%, respectively [5,6]. Intussusception in pregnancy and peripartum period is still rare and poses unique diagnostic and therapeutic challenges to both gynaecologists and surgeons ; causing potentially life threatening to both mother and child . Its diagnosis is extremely difficult and emergency surgery indicated [4].MRI , Abdominal and Transvaginal [6] Ultrasound scan, are useful imaging techniques in intussusception in pregnancy [5,7]. MRI is not readily available in many hospitals.

Case report

A 29- year old married Libyan woman, hospitalized on 25th Nov 2012 with acute colicky abdominal pain over epigastric region radiating to back and vomitings in emergency Obstetric & Gynaecology ward, from where she was referred to Surgery department for persistence of symptoms .

On examination; she was sick and pallor, with stable vital condition . Abdominal examination revealed upper abdominal tenderness and gravid uterus of 22wks size. P/V and P/R examinations were normal. She had a hard, globular mass over posterior aspect of right chest. [Fig.1]

US Scan of abdomen showed a doubtful mass on right lateral abdomen. Other investigations like CBP, FBS, LFT, Serum creatinine, Serum electrolytes, Serum amylase were within normal limits except low Hb%. ECG showed T-inversion in V1,V2,V3 leads but Echocardiogram showed good L.V. function and ejection fraction.

Emergency exploratory laparotomy was done. There was ileo-ileo-caeco-colic intussusception beyond hepatic flexor. Intussusception was reduced gently. A gangrenous segment of ileum found nearly 15cms proximal to ileo-caecal junction with an oval intraluminal growth at the apex; was resected along with 5cm margin and end-to-end anastomosis was done, along with appendicectomy . Rest of the abdominal organs were normal. Patient had uneventful recovery post-operatively.

Histopathological examination showed 22cms long, gangrenous segment of ileum with one well circumscribed mass of 2x2 cm at one end and two other smaller masses in rest of the resected ileum. [Fig.2] Microscopic picture was suggestive of undifferentiated Carcinoid tumours with free resected margins. Appendix was not affected by Carcinoid tumor.

Biopsy of the mass on the back was suggestive of secondaries.

Patient was referred to Oncology department for further management.

Discussion

Intussusception in pregnancy is extremely rare especially due to Carcinoid tumor. Intussusception is difficult to diagnose at the best of times and in pregnancy, even more so [4].

Carcinoid tumours of small intestine are rare , more so in pregnancy. Mid gut Carcinoid are often located in the distal ileum, frequently multicentric and often present with metastases to lymph nodes or liver [8]. These tumours secrete high levels of serotonin, kallikrein , prostaglandins and vasoactive peptides with clinical features of acute abdominal pain, vomiting and features of intestinal obstruction. Bone metastasis is extremely rare. Patients may present with features of Carcinoid syndrome, cardiac or hormonal complications of carcinoids [7]. Host of investigations are available for Carcinoid tumours but are not possible in pregnancy and in acute emergency. Clinical diagnosis and with limited possible investigations in pregnancy makes it more difficult to diagnose the condition . Moreover the risk of surgery, in a pregnant mother is obvious. Cytoreduction Surgery is the mainstay of management [9]. Pregnant women should avoid chemotherapy and radiation therapy until the baby is delivered. Selective specific medical treatment like Octreotide, and avoidance of conditions and substances that cause flushing; may be useful during pregnancy [10].

Conclusion

Stray incidences are found in literature; about cases of pregnancy with carcinoid tumor of the ileum, presenting as intussusception. Ultrasound scanning is a safe investigation in pregnancy and may confirm the diagnosis [4].

Even though it is a rare occurrence, surgeons should be aware of this possibility in pregnancy. Urgent and decisive intervention is required in these cases. In case of intraluminal tumor in the intestine, one should examine the entire GIT system, to exclude any synchronous tumour. In case of ileal Carcinoid tumours, along with resection of intestine, one should remove the appendix.



Fig 1. Secondary on the back of right chest

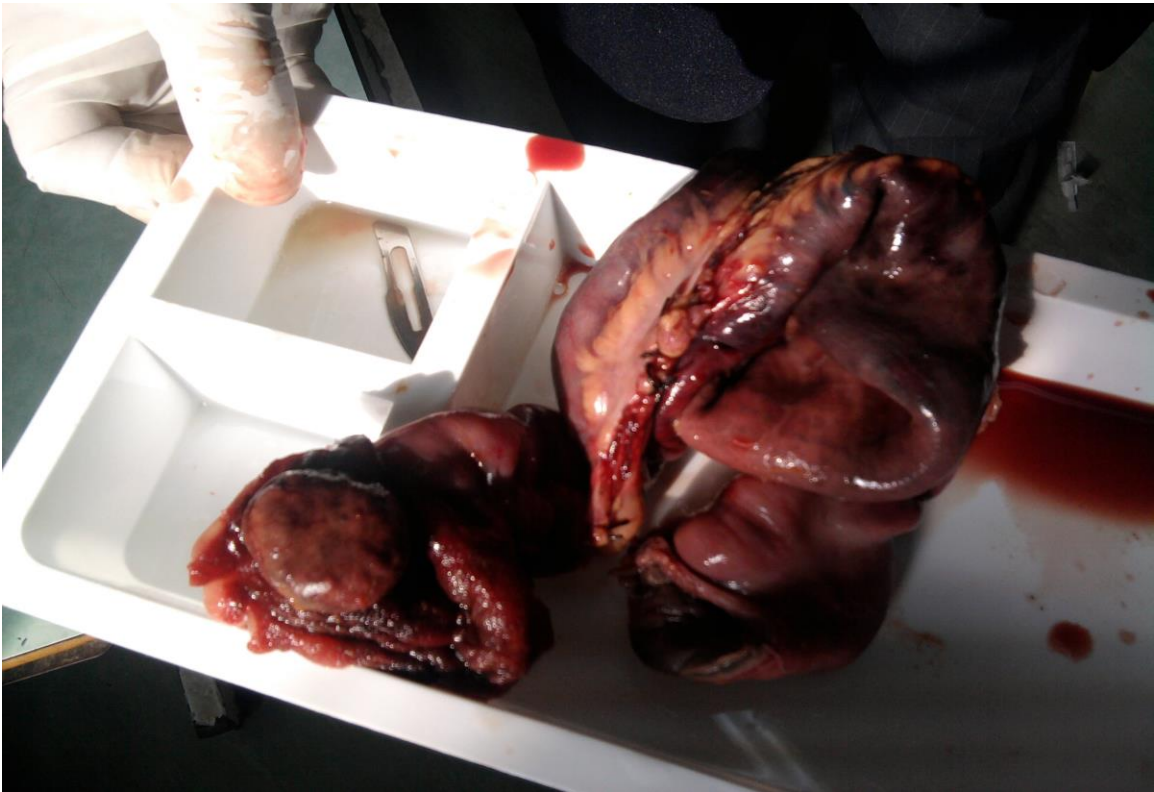


Fig. 2 Carcinoid tumors in the lumen of ileum.

References

- [1]. Sommer J, Marzotko F., (1984), Carcinoid tumors of the appendix and small intestine as unusual secondary findings during gynaecologic operations in and outside of pregnancy. *Zentralbl Gynakol* ; 106 (5): 314-24.
- [2]. Gilboa Y, Fridman E, Ofir K, Achiron R, (2008), Carcinoid tumor of the appendix : ultrasound findings in early pregnancy. *Ultrasound Obst. & Gynae.*, 31(5): 576-8.
- [3]. Kurz R, Steinhilber U, Buck J, Laqua D, Heinkelein J., (2003), Ileocolic intussusception of the terminal ileum caused by a Carcinoid tumor. *Z. Gastroenterol.*, 41(7): 659-62.
- [4]. Andreas Luhmann, Rachel Tait and Ahmed Hassan., (2009), Intussusception in a 20 weeks pregnant woman: a case report. *Cases Journal* : 2:6546doi:10.4076/1757-1626-2-6546. (Department of Surgery, Princes of Wales Hospital, Coity Road, Bridgend, CF31 1RQ, UK.)
- [5]. Osime OC1, Onakewhor J2 and Irowa OO1., (2010), Intussusception in pregnancy – A rarely considered diagnosis. *African journal of reproductive health: Volume: 14 ISSN : 1118-4841.* (14[1]: 145-148)
- [6]. Perdue PW, Johnson HW, Stafford PW., (1992), Intestinal obstruction complicating pregnancy. *Am J Surg.* : 164: 384-388.
- [7]. Choi SA, Park SJ, Lee HK, Yi BH, Kim HC., (2005), Preoperative diagnosis of small bowel intussusception in pregnancy with the use of sonography. *J Ultrasound Med.* : 24: 1575-1577.
- [8]. Amarapurkar DN, Juneja MP, Patel ND, Amarapurkar AD, Amarapurkar PD. (2010), A retrospective clinico-pathological analysis of neuroendocrine tumors of the gastrointestinal tract. *Trop Gastroenterol*: 31(2): 101-4.
- [9]. Hodul P, Malafa M, Choi J, et al. (2006), The role of cytoreductive hepatic surgery as an adjunct to the management of metastatic neuroendocrine carcinomas. *Cancer Control.*: 13(1): 61-71.
- [10]. Boudreaux JP, Klimstra DS, Hassan MM., (2010), The NANETS (North American Neuroendocrine Tumor Society) consensus guideline for the diagnosis and management of neuroendocrine tumors: well-differentiated neuroendocrine tumors of the Jejunum, Ileum, Appendix, and Caecum. *Pancreas.* : 39(6): 753-66.