



SYNCHRONOUS COLON CANCER PRESENTED AS ADULT ILEO-CAECAI INTUSSUSCEPTION, A RARE CASE REPORT

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. K Sri Devi

MBBS, MS(General Surgery), Associate Professor , Department of General Surgery, Government Kilpauk Medical College, Chennai – 600010

**Dr. J Sharmila
Beevi***

MBBS, Postgraduate in General Surgery, Department of General Surgery, Government Kilpauk Medical College, Chennai-600010. *Corresponding Author

ABSTRACT

Colorectal cancer (CRC) is the third most common tumor type worldwide with approximately 1.8 million new cases diagnosed per year. Despite the high incidence of newly diagnosed cases, the majority (70%-80%) of these tumors are resectable. These tumors can present as an incidental findings on screening colonoscopy, with anemia symptoms such as general weakness and fatigue (for right sided- tumors) or changes in bowel habits (for left sided tumors). In advanced cases, loss of weight and loss of appetite are also common presenting symptoms. Less common, yet emergent presentations include large bowel obstruction, severe gastrointestinal hemorrhage and free intra-abdominal perforation. Synchronous CRC (SCRC) tumors, defined as two or more primary tumors existing independently of one another, have an incidence rate of 2.3% - 12.4% of overall CRC with male predominance. Presentation of these tumors is usually identical to presentation of solitary CRC. Emergency surgical presentation, with two different surgical indications for operation is very rare. Herein, we present a case of SCRC tumor in a 32-year-old man, with indication for emergent surgery being ileo-caecal intussusceptions but incidentally was diagnosed to have sigmoid colon growth.

KEYWORDS : synchronous, colorectal cancer, intussusception, obstruction.

INTRODUCTION

Colorectal cancer (CRC) is the third most common malignancy worldwide, and the fourth most common in the United States, with approximately 1.8 million and 146,970 new cases annually (respectively). Death rate due to CRC is almost 4.3 / 100000 between the ages of 20 and 54 . These tumors usually have a wide range of presentations, including rectal hemorrhage, abdominal pain, changes in bowel habits, and anemia. Although the aforementioned presentations are the most common, approximately 7% to 29% of these tumors can present as a surgical emergency in the form of massive gastrointestinal hemorrhage, large bowel obstruction or perforation.

The aforementioned surgical emergencies are mostly treated by means of resection of the involved segment along with its mesentery, followed by primary anastomosis or proximal bowel diversion in the form of stoma. Leaks from primary anastomosis during urgent colonic resection reaches 12% compared to 8% in primary anastomosis done in elective Surgeries.

Synchronous CRC (SCRC) tumors are defined as two or more primary tumors existing independently in the same patient, or within 6 months of the initial presentation.

The incidence rate of these tumors ranges from 2.3% to 12.4%. In most cases, synchronous tumors are comprised of two distinct growths, although various cases were described with patients presenting with four concomitant tumors. Although it can develop in variable sections of the colon, SCRC has a higher prevalence in the right colon, in comparison to solitary CRC [7]. The mean age of presentation of SCRC is 47-79 years, and it is more common in males than in females (M/F ratio: 1.8:1).

As with solitary CRC, synchronous types have a wide range of presentations, depending on several factors, such as patient's age and location of the primary tumor. They can also present as an acute surgical emergency, although such presentation is regarded as a rare entity.

Large bowel obstruction caused by a tumor can be due to critical narrowing of the bowel lumen or due either intussusception. Intussusception in adults is usually pathological due to the presence of a leading point, which could be malignant in up to 66% in cases of colo-colic intussusceptions . Perforation of the large bowel due to CRC may develop either the site of the primary tumor due to transmural bowel wall penetration, or more proximal due to extreme dilatation of the large bowel, which in turn causes ischemia and leads to perforation. The coexistence of two different surgical emergencies in SCRC is very rare.

Herein, we present a case of SCRC tumour in a 32-year-old man, with indication for emergent surgery being ileo-caecal intussusceptions but incidentally was diagnosed to have sigmoid colon growth .

CLINICAL PRESENTATION

32 year old male patient came to Emergency department with complaints of Abdominal pain and distension for 1 day, vomiting of 3 episodes which was bilious, non feculent, non projectile vomiting. Patient has no history of fever, melena, bleeding PR, UGI bleeding.

Patient has no comorbidities , or no history of previous surgeries.

On examination, patient had tachycardia. Abdominal examination revealed a distended abdomen, diffuse tenderness, with guarding. Mass of size 10*10cm is palpable in right Iliac fossa and extending into right lumbar region. Bowel sound was absent.

Complete blood count exhibited increased white blood cells of 18,000, with 80% neutrophils and 7% bands. His liver and kidney function tests were within normal limits. A chest x-ray was normal without free air under the diaphragm.

Ultrasonogram revealed a typical appearance of "coiled spring" pattern.

Intussusception



Ultrasonography shows a typical appearance of "coiled spring" pattern.

A computed tomography (CT) scan showed bowel in bowel, caecal wall thickening, features suggestive of ileo-caecal intussusception.



The patient was admitted and diagnosed as ileo-caecal intussusception with acute intestinal obstruction.



Due to these findings, the patient underwent an exploratory laparotomy, during which ileo-caecal intussusception was found, incidental growth was felt at the sigmoid colon, hence total colectomy was done, and then proceeded with ileo-rectal anastomosis.

Patient post op period was uneventful and patient started on oral feed from POD 4 after patient has passed flatus. Patient tolerated oral feeds well



DISCUSSION

Nowadays, CRC tumours are regarded as the main gastrointestinal tumours, with SCRC tumours confounding up to 12.4% of cases. In most cases, two synchronous tumours are found, although some cases described up to seven synchronous tumours along the colon. Nearly one-third of CRC tumours demand urgent surgery, usually due to a single surgical indication, even in patients with SCRC. The most common emergency surgical indication in CRC is large bowel obstruction (80%), mostly located at the sigmoid colon, followed by perforation with a rate of 20%. In our case the emergent indication was intussusception but the sigmoid colon growth turned out to be an incidental intraoperative finding.

Colonic perforation due to CRC usually develops due to transmural penetration of the bowel wall by the tumour, which may cause localised peritoneal contamination. Perforation may also develop proximal to tumour site, in which case, a diffuse peritonitis may occur following the spillage of faecal content. Diagnosis of intestinal perforation can be done by imaging studies, mainly a CT scan, which is known to have the highest sensitivity and specificity for examining the possible aetiology and extent of perforation. Most cases will require operative intervention, whereas selected cases might respond to conservative treatment. Sepsis and diffused peritonitis are absolute indications for surgery, while controlled or contained perforation can be managed conservatively with interventional drainage of the collection under radiological surveillance. In our case, the CT scan revealed ileo caecal intussusception with air fluid level and fluid, findings that are indicative for operative intervention. Bowel intussusception is a common aetiology for intestinal obstruction in children, where it is mostly idiopathic in nature. On the contrary, in adults, intussusception is a rare cause of bowel obstruction, constituting up to 5% of bowel obstruction cases. In their study, Brayton and Norris's examined 745 cases of adult intussusceptions. Of them 52% involved the small bowel and 38% the large bowel (17% ileo-caecal, 17% colocolic, 4% appendiceal). Most cases of large bowel intussusceptions had an underlying pathological leading point. Hirota et al. reported a retrospective study including 44 cases of intussusception in adults, of which 26 (16 ileocecal and 10 colon) involved the large bowel. Eighty percent of ileocecal and 90% of colonic intussusceptions were associated with malignant tumours. Malignant tumours (mainly adenocarcinoma) consist the leading cause in 66% of colon intussusception cases, whereas they only constitute 30% of the cases of small bowel intussusceptions.

The classic triad of intussusception in children (abdominal pain, currant jelly stools and palpable abdominal mass) is very rare in adults, in which the presentation usually includes intermittent chronic contractions, nonspecific intestinal obstruction signs (such as nausea), vomiting, GI bleeding, constipation, or abdominal distension. The modality of choice for diagnosis of adult intussusception is abdomino-pelvic CT scan. Typical findings can be the appearance of a target sign or sausage shape, with variable degree of proximal bowel

dilatation. Due to the high prevalence of an underlying leading cause, including malignant neoplasms, intussusception in adults, especially the colonic type, are treated by means of operative interventions that include resection of the intussuscepted segment. As has been mentioned previously, it is well known and already reported on that solitary and synchronous colon cancer can present as a surgical emergency, yet the presence of synchronous tumour presenting with dual distinct surgical emergency is extremely rare.

REFERENCES

1. International Agency for Research on Cancer (IARC). Global cancer incidence. In: New Global Cancer Data: GLOBOCAN 2018. The Union for International Cancer Control [Internet]. 2018 [Accessed 2018 Sep 12]. Available from: <https://www.uicc.org/news/new-global-cancer-data-globocan-2018#>.
2. Siegel RL, Miller KD, Jemal A. Colorectal cancer mortality rates in adults aged 20 to 54 years in the United States, 1970-2014. *JAMA* 2017;318:572-4. Doi:10.1001/jama.2017.7630
3. Majumdar SR, Fletcher RH, Evans AT. How does colorectal cancer present? Symptoms, duration, and clues to location. *Am J Gastroenterol* 1999;94:3039-45. doi:10.1111/j.1572-0241.1999.01454.x
4. Bhasin DK, Rana SS. Malignant colorectal obstruction: Looking for synchronous lesions with the scope through a metal stent...! *Gastrointest Endosc* 2006;63:820-3. Doi:10.1016/j.gie.2006.02.014
5. Kim J, Mittal R, Konyalian V, et al. Outcome analysis of patients undergoing colorectal resection for emergent and elective indications. *Am Surg* 2007;73:991-3.
6. Cunliffe WJ, Hasleton PS, Tweedle DE, et al. Incidence of synchronous and metachronous colorectal carcinoma. *Br J Surg* 1984;71:941-3.