

# The Unusual Presentation of Ceacal Cancer with Synchronous Tumor at Descending Colon: A Case Report

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**Abstract** Synchronous primary colorectal cancer is rare and only occurs in 2% to 11% of all colorectal cancers. Thus, preoperative or intraoperative detection of synchronous tumor is vital because if they are not recognized, they may present at an advanced stage, thereby reduce the probability of cure. Early identification of synchronous tumor may alter the extensiveness of the surgical procedure in order to decide for strategic therapeutic management.

**Keywords:** *synchronous colorectal cancer; colorectal adenocarcinoma*

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## 1. Introduction

Multiple primary adenocarcinomas of the large intestine were described for the first time by Czerny in 1880 [1]. Synchronous adenocarcinomas is defined as presence of two or more primary cancers throughout colon and rectum, detected either pre / intraoperatively, or in a 6 month period postoperatively. They should be distinctly separated by at least 4 cm distance and they should not consist of submucosal spread or a satellite lesion of each other [2].

## 2. Case Report

A 48 year-old Malay male, presented with chronic lumbar pain for 6 months duration associated with significant loss of weight, loss of appetite and generalized fatigability. There was no history of altered bowel habit or family history of any malignancy. Clinical examination revealed pallor with soft abdomen, a vague mass at the right iliac fossa and no organomegaly. No mass felt per rectally.

Colonoscopy done showed fungating mass at the ceacum and another fungating mass at sigmoid descending colon junction about 40cm from anal verge. Biopsy of the mass taken and reported as moderately differentiated adenocarcinoma. CEA was 4.8 mcg/l. CT scan of the abdomen and pelvis showed synchronous colonic tumors in the ceacum and descending colon.

Laparotomy confirmed 2 tumours at the cecum and descending colon for which subtotal colectomy with

ileorectal anastomosis was performed. Histopathological examination revealed the presence of tumor at both ceacum and descending colon. The ceacal tumor measuring approximately 70 x 15mm whereas the descending colon tumor measuring 50 x 20mm. Both tumours were reported as moderately differentiated adenocarcinoma with 1 out of 24 lymph nodes showed metastatic tumor deposit (pT4 N1, modified Duke's stage C2).

The patient recovered well after surgery and he received 12 cycles of FOLFOX regime chemotherapy. Repeated CT scan and colonoscopy post operatively were normal.

## 3. Discussion

Colorectal cancer is the commonest cancer among males and second only to breast cancer among females in Peninsular Malaysia [3]. The incidence of colorectal cancer increases with age and is slightly higher among males compared to females. The incidence is higher among Chinese if compared to Malay and Indian population. The lifetime risk of colorectal cancer is around 5% in the general population. More than 90% of the colorectal cancer cases in Malaysia occur in those over the age of 40 [3].

Multiple primary carcinomas may occur in the colon and rectum. Two or more primary carcinomas can coexist at the time of diagnosis (synchronous) or develop consequently (metachronous) [4]. The incidence of synchronous colorectal cancer ranged between 2 to 11 percent. Synchronous CRC was defined according to Warren and Gates criteria as i) proven adenocarcinoma, ii) proven to be distinct, and iii) exclusion of probable

metastatic lesions from the primary CRC [5]. By definition, the tumours were diagnosed at the time of presentation or within 6 months of the initial diagnosis [5]. Synchronous tumors were more commonly seen in men than in women, and in patients above 70 years of age compared to those in younger age groups [5]. Also, those

with familial adenomatous polyposis, inflammatory bowel disease (ulcerative colitis) and hyperplastic polyposis have higher risk of developing multiple colorectal carcinomas [2,6]. Altogether they accounted for 10% of synchronous colorectal cancer [4]. Herein, the patient had no family history of cancer or genetic predisposing factors.



**Figure 1.** Preoperative CT abdomen and pelvis showed presence of tumor at both cecum and descending colon

Index or first primitive cancer is the most voluminous synchronous cancer. When the index lesion is located in the cecum, the incidence of left colon synchronous cancers is higher than when the index lesion is located at the left colon [4]. In this case, the probably index lesion was the ceecal tumor as the size is larger than the lesion in the descending colon.

Early detection of synchronous colorectal carcinoma is crucial. Preoperative total colonoscopy, cautious intraoperative palpation of the entire colon and careful inspection of the resected specimen should be performed in all patients in order to detect synchronous tumor [7,8,9]. It should be emphasized that intraoperative palpation alone can miss up to 69% of the synchronous tumor [4]. If the synchronous lesion is not recognised, the lesion will progress and can present as early metachronous carcinoma and consequently require repeated operation [7]. Such lesions are usually advanced in pathological states and had a poor prognosis [7].

A routine preoperative colonoscopy has been recommended for patients diagnosed with colorectal cancer to identify synchronous polyps or cancer, however preoperative colonoscopy of the entire colon is sometimes inaccessible due to bowel obstruction by the tumor, poor bowel preparation or limited facilities [8]. Thus, intraoperative colonoscopy is an option when a preoperative colonoscopy was impossible. However, it is likely to increase surgical time and possible risk of infection [9,10].

Distant metastases were more common in those with synchronous colorectal carcinomas than single tumor, and thus associated with poor prognosis [5,11]. However, the prognosis of synchronous tumor was similar to that of single tumor if the pathological stages were identical and the resections were curative [7,8]. In the case reported, both the tumors at the cecum and descending colon were pathologically identical. Therefore, five-year survival rate for this patient, with synchronous carcinoma of the colon is estimated to 53%, similar to patients with solitary colorectal cancer [6].

Generally, first line treatment for colorectal cancer is surgery. But, the presence of synchronous carcinoma requires more aggressive approach. One third of the synchronous tumors were located in different surgical segments and thus requiring extended resection [5]. Radical resection such as total, subtotal colectomy or proctocolectomy may be the best option in such cases. As occurred in this patient, the tumors were located at cecum and descending colon, thus subtotal colectomy was indicated.

#### 4. Conclusion

A synchronous colorectal cancer is uncommon and that detection of a single colonic carcinoma demands a thorough examination of the entire colon. Preoperative

total colonoscopy, cautious intraoperative palpation of the entire colon and careful inspection/histopathological examination of the resected specimen should be performed in all patients in order to detect synchronous tumor.

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