

Multiple synchronous intestinal tumors

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Synchronous cancer in small and large bowel is rare. We present a 83 years old woman with synchronous primary cancers of terminal ileum, sigmoid and upper rectum.

Billroth first described multiple primary malignancies in a single patient in 1879 [1]. During the past century, numerous series and case reports in the literature have cited similar occurrences involving a single organ or multiple organ systems. The majority of multiple primary malignancies involving multiple organs are metachronous lesions, with synchronous lesions occurring less frequently. More than two primary synchronous malignancies involving two or more organs are extremely rare.

A 83 year-old woman presented with lower abdominal pain, urinary retention and constipation. There was no history of vomiting. There was no history of change in bowel habits, bleeding per rectum or melena. The abdomen was tender in right iliac fossa but soft. Per rectal examination showed a stenosing tumor in rectum. CT scan done showed fluid in the right iliac fossa which was drained under CT guidance and found out to be pus. Laparotomy done showed pus collection in right iliac fossa and a diagnosis of appendicular abscess was made. Defunctioning loop ileostomy was done for rectal carcinoma. Post operative period was uneventful. Later, laparotomy was undertaken in view to do anterior resection in this patient. During laparotomy, tumor was found to be unresectable because of the perirectal spread and two more tumors were found. Adjuvant radio-chemotherapy was given and third laparotomy was done. Three tumors were found including a stenosing tumor in terminal ileum proximal to loop ileostomy, polypoid mass in upper rectum and another possible tumor in rectum. Terminal ileum tumor was

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excised and resection and anastomosis of terminal ileum with closure of ileostomy was done. Hartmann's procedure was done for large bowel and two ends were not anastomosed because of faecal loading and possible residual tumor in pelvis.

Histology showed Duke C moderately to poorly differentiated adenocarcinoma with five lymph nodes positive out of twenty-five. Small bowel showed moderately differentiated adenocarcinoma with one positive lymph node out of five. They concluded that it was difficult to be certain about the multifocality of these bowel tumors and it was possible that these represent three separate tumors identified - two within specimen of large bowel and one from small bowel specimen. It was also possible that larger tumor represented the primary lesion which had spread to other sites.

Synchronous primary cancers are not unusual. Approximately 2% to 6.5% of colorectal cancers present as synchronous or metachronous cancers [2]. Numerous autopsy series have reported a 1.8-11% incidence of multiple primary cancers [3]. The Mayo clinic reported a 5.1% incidence of multiple primary tumors in greater than 3700 patients [4]. Cleary described 30 patients with three or more primary malignancies over a 20 year period [5]. The majority of these were metachronous lesions involving more than one organ system. Colorectal cancer was the first primary malignancy in 14 of the patients. We found three tumors during the second laparotomy but it was difficult to excise at that time because of the perirectal spread. During the third laparotomy, the tumors were excised but the ends were not joined because of concerns regarding the positive margins. We think that it could be three different tumors but further staining with immunohistochemistry needs to be done to confirm this fact.

References

- [1] T. Billroth: *Chirurgische Klinik*, Wein, Berlin, Vol. 258, (1897).
- [2] G.B. Ekelund and B. Phil: "Multiple carcinomas of the colon and rectum", *Cancer*, Vol. 33, (1974), pp. 1630–1634.
- [3] J.W. Pickeren: "Cancer often strikes twice", *NY State J. Med.*, Vol. 63,(1963), pp. 95–99.
- [4] C.G. Moertel, M.B. Dockerty and A.H. Baggenstoss: "Multiple primary malignant neoplasms", *Cancer*, Vol. 14, (1961), pp. 221–248.
- [5] J.B. Cleary, K.K. Kazarian and W.L. Mersheimer: "Multiple primary cancer. Thirty patients with three or more primary cancers", *Am. J. Surg.*, Vol. 129,(1975), pp. 686–690.
- [6] A.A. Deshpande, V.K. Thapar, G.D. Bakshi et al.: "Synchronous primary adenocarcinoma of small and large bowel", *Indian Journal of Gastroenterology*, Vol. 17(4), (1998), pp. 156.
- [7] M.E. Mitchell, J.A. Johnson and P.B. Wilton: *Journal of Clinical Gastroenterology*, Vol. 23(4), (1996), pp. 284–288.