A Rare Case: Synchronous Gastric and Colon Cancer

Nadir Bir Olgu: Senkron Mide ve Kolon Kanseri

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ABSTRACT

The development of synchronous gastric and colon cancers is particularly rare. When the increasing worldwide average life expectancy is taken into consideration, the increase in rate of synchronous and metachronous cancers is an expected situation. It is considered that a preoperative detailed investigation is required in patients with primary tumor in terms of synchronous and metachronous cancers. In this case report, we aimed to present the diagnostic and therapeutic methods in a patient with synchronous gastric and colon cancers.

Keywords: Synchronous cancer, gastric cancer, colon cancer

ÖZ

Senkron mide ve kolon kanseri gelişimi nadir görülmektedir. Dünya genelinde ortalama yaşam süresinin arttığı göz önünde bulundurulduğunda senkron ve metakron kanser oranında artış olması beklenen bir durum olup primer tümör saptanan hastaların senkron ve metakron tümör açısından operasyon öncesi ayrıntılı olarak araştırılmasının gerektiğini düşünmekteyiz. Bu sunumumuzda senkron mide ve kolon kanserli bir hastada tanı ve tedavi yöntemini irdelemeyi amaçladık.

Anahtar Kelimeler: Senkron kanser, mide kanseri, kolon kanseri

Introduction

Multiple primary cancers develops simultaneously or consecutively, and independently from each other in the same patient, and the prevalence of multiple primary cancers varies in the ratio of 0.7% to 11.7% of all types of carcinomas in the medical literature.^{1,2,3} In general, multiple primary cancers are divided into two groups; synchronous and metachronous. If the latter cancer is detected after 6 months of the first diagnosis, it is named as metachronous; or if it is detected within 6 months of the first diagnosis, it is named as synchronous cancer.⁴ Synchronous gastric and colon cancer are rare cancer types. The most common synchronous cancer is colorectal cancer in patients with gastric cancer.^{5,6} In the present study, it was aimed to compare the treatment process of an operated patient with gastric and colon cancer with the literature data.

Case Report

A female patient aged 60 years was admitted with complaints of malaise, anorexia and constipation. The physical examination of the patient did not show any pathological lesion, except a minimal distension at the abdominal region. Her background and family history were normal.

Hemoglobin concentration was detected as 8.7 g/dL in the whole blood count test; afterwards, gastrointestinal system endoscopy was planned to be performed in terms of anemia etiology. Upon the presence of an infiltrated area of 2 to 3 cm in length at the incisura angularis of stomach in the gastroscopy, and multiple biopsies were obtained from this area. Her pathology report was evaluated as moderately differentiated invasive adenocarcinoma. Ulcero-vegetating mass obstructing lumen in the sigmoid colon was detected in the colonoscopy. The biopsy result of this mass was reported



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as well-differentiated adenocarcinoma. Further pathologies were not observed at the distal colon. Whole body positron emission tomography computerized tomography scanning showed tumoral lesions that were settled at the wall thickening area in the middle section of small curvature of the stomach (segment of 2.4 cm; maximum standardized uptake value (SUV_{max}: 8.1) and at the wall thickening area in the rectosigmoid region (approximately segment of 8 cm, SUV_{max}: 38.9).

Pathologic fluordeoxyglucose involvement was not observed in other abdominal areas, head-neck region, thorax and musculoskeletal system.

Simultaneous operations were planned in order to remove the corresponding lesions. Distal subtotal gastrectomy+gastroenterostomy+braun anastomosis+ anterior resection+Hartmann's colostomy were performed for synchronous gastric and colon cancer. Colon anastomosis was not preferred due to the presence of differences in the colon diameters. Post-operation gastric and colon materials of the patient were figured in Figure 1 and Figure 2.

At the post-operative 3rd day, nasogastric tube was removed. Her bowel passage was open and she was started on oral feeding at the post-operative 5th day. She had tolerated oral feeding and further complication was not detected. She was discharged with full recovery at the post-operative 6th day.

"Moderately differentiated invasive adenocarcinoma in appearance of a signet-ring cell with diameter of 3 cm at the small curvature of the stomach, and peripheral 19 reactive lymph nodes" were reported in the pathology report. "Moderately differentiated invasive adenocarcinoma involving all intestinal layers in the length of 6.5 cm and 10 metastatic lymph nodes" were reported in 25 cm-colon material. Both resection materials were reported as "tumor was not detected at the surgical boundaries".

Informed consent of the patient was obtained for all clinical diagnostic and treatment procedures, and for the academic sharing of the assessments regarding these procedures.

Discussion

The risk of development of secondary tumors in cases with primary tumors is 1.29 times higher in comparison to healthy individuals.⁷ Multiple primary tumors are more common in advanced-aged group (>65 years) in accordance with the age-classification of World Health Organization. Thus, aging is considered as a risk factor in cancer development. Aging-related weakness in immune system and low-resistance associated with carcinogen exposure might be the relevant causes.⁸ Although, any defect in DNA repair system might have a role in multiple cancer development, the reason of development of synchronous cancer still remains uncertain.⁹

The most common synchronous cancer among patients with gastric cancer is colorectal cancer, and the most common synchronous cancer among patients with colorectal cancer is gastric cancer. It is known well that the most common cancer is gastric cancer in patients with hereditary non-polyposis colorectal cancer, except colon cancer.¹⁰

In case of a synchronous cancer, as the prognosis of earlystage cancer is better than advanced-stage cancer and it might be affected from a synchronous cancer, surgical operations should be performed as synchronous as possible.^{11,12} As average life expectancy worldwide has increased, an elevation in the ratio of synchronous and metachronous cancers is an expected result. A detailed pre-operation examination of patients with primary tumor is considered to be required in terms of synchronous and metachronous cancers.



Figure 1. Stomach material



Figure 2. Colon material

Ethics

Informed Consent: Consent form was filled out by all participants.

Peer-review: External and Internal peer-reviewed.

Authorship Contributions

Surgical and Medical Practices: Ayhan Mesci, Nedim Akgül, Concept: Volkan Doğru, Design: Nedim Akgül, Ebubekir Gündeş, Data Collection or Processing: Nedim Akgül, Ebubekir Gündeş, Analysis or Interpretation: Ayhan Mesci, Literature Search: Ebubekir Gündeş, Writing: Nedim Akgül. Conflict of Interest: No conflict of interest was declared by the authors.

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