

TRIPLE SYNCHRONOUS TUMORS: GASTRIC, GALLBLADDER, AND SIGMOID ADENOCARCINOMA: A CASE REPORT

ÜÇLÜ SENKRON TÜMÖRLER: MİDE, SAFRA KESESİ VE SİGMOİD ADENOKARSİNOMU OLGU SUNUMU

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ABSTRACT:

In this case report a patient with triple synchronous tumors: gastric adenocarcinoma, gallbladder adenocarcinoma, and adenocarcinoma of the sigmoid colon has been presented. An 86-year-old female patient with a history of weight loss and epigastric pain was admitted to our department. Her upper gastrointestinal endoscopy and colonoscopy showed a 2 cm-sized polypoid mass in the posterior wall of the gastric antrum and a 3,5 cm-sized tumor in the sigmoid colon. A third tumor was detected in the gallbladder by ultrasonography and tomography. In the same operation, all tumors were removed by sigmoid colon resection, cholecystectomy, and subtotal gastrectomy. Stages of tumors were for gastric adenocarcinoma (pT1N0), gallbladder adenocarcinoma (pT1N0), and sigmoid adenocarcinoma (pT4N0). 14 months after surgery the patient was re-operated due to ileus caused by recurrence of colonic tumor. Left hemicolectomy, partial resection for adhesion of the small intestine, and side-by-side anastomosis were performed. In the intensive care unit, the patient died of cerebrovascular incident after 4th day of surgery. The chance of finding multiple

primary malignancies should always be thought of throughout the treatment and follow-up of elderly cancer patients. The physician should be alert to the possibility of their occurrence to achieve proper treatment.

Keywords: Synchronized triple tumor, multiple primary cancer, adenocarcinoma

ÖZET:

Bu olgu sunumunda, gastrik adenokarsinom, safra kesesi adenokarsinomu ve sigmoid kolon adenokarsinomu olmak üzere üçlü senkron tümörü olan bir hasta incelenmiştir. Kliniğimize kilo kaybı ve epigastrik ağrı öyküsü olan 86 yaşında kadın hasta başvurdu. Üst gastrointestinal sistem endoskopisi ve kolonoskopisinde mide antrum arka duvarında 2 cm büyüklüğünde polipoid kitle ve sigmoid kolonda 3,5 cm büyüklüğünde tümör saptandı. Ultrasonografi ve tomografi ile safra kesesinde üçüncü bir tümör tespit edildi. Aynı ameliyatta sigmoid kolon rezeksiyonu, kolesistektomi ve subtotal gastrektomi ile tüm tümörler çıkarıldı. Tümörlerin evreleri mide adenokarsinomu (pT1N0), safra kesesi adenokarsinomu (pT1N0) ve sigmoid adenokarsinom (pT4N0) idi. Ameliyattan 14 ay sonra hasta, kolon tümörünün

nüksü sonucu oluşan ileus nedeniyle tekrar ameliyat edildi. Sol hemikolektomi, ince barsak adezyonu için parsiyel rezeksiyon ve yan yana anastomoz yapıldı. Yoğun bakım ünitesinde yatan hasta ameliyat sonrası 4. gününde serebrovasküler olay sonucu kaybedildi. Yaşlı kanser hastalarının tedavi ve izlemi boyunca birden fazla primer malignite bulma şansı her zaman düşünülmelidir. Uygun tedaviyi elde etmek için multiple kanserin ortaya çıkma olasılıklarına karşı uyanık olunmalıdır.

Anahtar Kelimeler: Senkronize üçlü tümör, multipl primer kanser, adenokarsinom

INTRODUCTION

Multiple primary cancers (three or more malignancies) a rare occurrence, seen in less than 1,7 % of patients (Bannon,2023). The chance of finding multiple primary malignancies should always be thought of throughout the treatment and follow-up of elderly cancer patients. This study presents a rare case of triple synchronous tumors: gastric adenocarcinoma, gallbladder adenocarcinoma, and adenocarcinoma of the sigmoid colon, that were all resected in a single operation.

CASE

A 86-year-old female patient applied with complaints of abdominal pain and weight loss, to the General Surgery Clinic of Istanbul Training and Research Hospital. A tumor was detected in the gallbladder by ultrasonography and tomography (Figure 1A). Her upper gastrointestinal endoscopy, colonoscopy, and tomography showed a 2 cm-sized polypoid mass in the posterior wall of the gastric antrum (Figure 1B) and a 3,5 cm-sized tumor in the sigmoid colon (Figure 1C). In the same operation, all tumors were removed by sigmoid colon resection, cholecystectomy, and subtotal gastrectomy. Pathological Stages of tumors were gastric adenocarcinoma (pT1N0), gallbladder adenocarcinoma (pT1N0), and sigmoid adenocarcinoma (pT4N0). 14 months after surgery the patient was re-operated due to ileus caused by recurrence of colonic tumor. Left hemicolectomy, partial resection for adhesion of

the small intestine, and side-by-side anastomosis were performed. In the intensive care unit, the patient died of cerebrovascular incident after 4th day of surgery.

Consent was obtained from the patient in accordance with the Helsinki criteria for the case report.

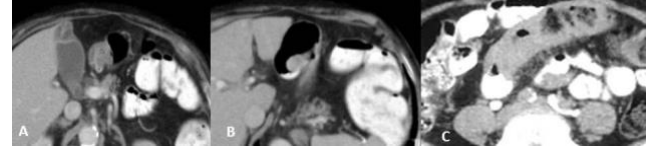


Figure 1: Gallbladder (A), Gastric (B) and Sigmoid tumor (C)

Table1. Werthamer criteria for the definition of multiple primary cancers

1. The malignancies must be primary in different organs
2. Paired-organ (e.g., breast, kidney) malignancies (synchronous or metachronous) are viewed as a single primary
3. Multiple malignant tumours originating in one organ are viewed as a single primary.
4. The lower intestine and uterus (with adnexa) are each considered single organs
5. The malignant nature of the lesions must be confirmed histologically.
6. The lesion should be histologically proven to be non-metastatic (may not be possible).

DISCUSSION

According to pathologic examinations of autopsy cases executed by the Japanese Society of Pathology in 1996, double primary cancer is seen with an average score of 12,6%, and triple primary cancer is seen at 1,7% (Moertel,1961). Lee and friends found 14 extracolonic primary malign tumors over 308 patients with colorectal carcinoma (Lee,1982).

Warren and Gates propose the definition criteria for colorectal extracolonic primary cancer cases related to colorectal cancer (familial polyposis

excluded). These are; a)The malignancy in every tumor must be defined with photos, b)Every tumor must be different and c)Primary tumors

should be excluded from others in case of metastasis (Warren,1932).

There are also Werthamer criteria for the definition of multiple primary cancers (Werthamer,1961) (Table 1). Our case also fits in with Werthamer's criteria. All malignancies are primary tumors originated from different organs and confirmed histologically non-metastatic.

In our clinic, there was no other synchronized triple tumor case among 1500 cancer cases between the years 2005 and 2013. The double synchronized tumor was seen only in two cases. These cases were gastric and pancreas, rectum, and cecum cancers together.

According to Yosino et al, the prognosis of patients with multiple primary cancers is independent of each cancer's stage. Separated surgical resection must be performed for each of these tumors (Yoshino,1984). In our case, in the same operation, all tumors were removed separately by sigmoid colon resection, cholecystectomy, and subtotal gastrectomy.

Tamura presented in 2003 a similar case of synchronous triple early cancers occurring in the stomach, colon, and gallbladder. Distal partial gastrectomy, simple cholecystectomy, and endoscopic mucosal resection were performed for colon cancer(Tamura,2003)

In another case report a patient with multiple primary cancers bilateral breast cancer, ovarian cancer, and retroperitoneal neuroendocrine carcinoma has been presented. The development of third or additional primary malignancies is rare (Demirci, 2010).

A 60-year-old man diagnosed with three primary cancers, including pulmonary mucinous adenocarcinoma, schwannoma, and metastatic esophageal adenocarcinoma was also reported (Findakle,2020). Another case involved a 61-year-old male with synchronous lung, esophageal, and renal cancers (Bannon ,2023) .A 71-year-old male with three histologically distinct tumors in the buccal mucosa, esophagus, and

pancreas also reported (Saha, 2024).Previous case reports have highlighted cancers associated with breast cancer, including skin cancer, gastrointestinal cancer, colon cancer, hematologic tumors, sarcomas, lung cancer, gynecologic tumors, thyroid cancer and urinary malignancies (Nomura, 2021).

Definition of multiple primary has rediscrined over time in the United States. Paired organs should be considered as two distinct and separate organs. Specific exceptions include ovary and retinoblastoma. Identification of metachronous multiple primary tumors is simpler than synchronous tumors. The 2-month rule needs to be reconsidered later (e.g., 4 months or 1 year) to distinguish synchronous from metachronous tumors. (Howe,2003). In our case, all tumors were diagnosed in the same period.

CONCLUSION

The chance of multiple primary malignancies should always be considered throughout the treatment and follow-up of elderly cancer patients. The physician should be alert to the possibility of their occurrence to achieve proper treatment.

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