

# Synchronous Double Primary Malignant Tumor of the Remnant Stomach and Gallbladder: A Case Report

Remnant Mide ve Safra Kesesi Senkron Primer Malign Tümörü, Olgu Sunumu  
Genel Cerrahi

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## Özet

Senkron primer malign tümörler olgu sunumu olarak daha önce literatürde belgelenmiştir. Ancak, remnant mide ve safra kesesi senkron primer tümörü daha önce literatürde yer almamış olup, bu hasta, literatürde yayınlanan ilk olgudur. Yetmiş bir yaşındaki erkek hastamızda, senkron remnant mide ve safra kesesi adenokarsinomu saptanmış olup, kendisine küratif cerrahi rezeksiyon uygulanmıştır. Ameliyat sonrası ilk bir yıllık izleminde lokal veya uzak rekkürrens gözlenmemiştir. Tek bir hastada senkron çoklu primer tümör nadir olmasına rağmen, geçmişe oranla daha sık görülmekte olup, bunun sebebi yaşlı hasta sayısındaki artış ve tanı koydurucu tekniklerdeki gelişmedir. Hastanın prognozu her bir kanserin evresine bağlıdır. Senkron tümörlerde cerrahi tedavi küratif olarak her bir tümörün rezeke edilmesidir. Özellikle yaşlı hastalarda, ameliyat öncesi değerlendirme ve muayenede senkron çoklu primer kanser olabileceği akılda tutulmalıdır.

**Anahtar kelimeler:** İkili primer kanser, Senkron tümör Safra kesesi kanseri Remnant mide kanseri

## Abstract

Synchronous double primary malignant neoplasms in a single patient have been well-documented in the literature. But this is the first synchronous double primary malignant neoplasms of the remnant stomach and gallbladder multifocal carcinoma cases which reported in the literature. We describe a case of a 71-year-old male patient with synchronous double primary cancer who is doing well with no evidence of local or distant recurrence more than one years after two surgical prosedures. Multiple primary malignant tumors in one patient are relatively rare but multiple synchronous cancers have become more common than in the past because of an increase in the number of elderly patients and also improvements in diagnostic techniques. The prognosis of patients with multiple primary malignant tumors can be depended to the stage of each malignancies. The surgical treatment of choice for synchronous multiple primary malignancies is curative resection of each malignant tumors The possibility of multiple primary cancers should be kept in mind during the preoperative examination and peroperative evaluation of the abdomen especially in older patients.

**Keywords:** Double primary cancer, Synchronous tumor Gallbladder cancer Remnant gastric cancer

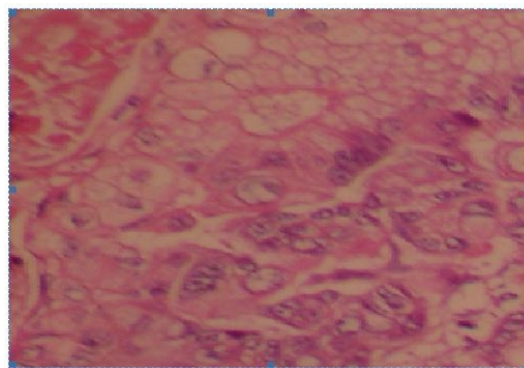
## Introduction

There were different description about synchronous or metachronous, cancer. One of the description is synchronous,cancer in which the cancers occur at the same time or within 2 months, and metachronous cancer, in which the cancers follow in sequence <sup>1</sup> and the other description is synchronous double primary malignant neoplasms are a secondary malignancy occurring at the same time or within 6 months after the first malignancy <sup>2</sup>. Multiple synchronous cancers in the same organ or in various organs are rather unusual. Sometimes this condition is diagnosed during the staging process of the tumour, by postoperative histology of a resected organ, but it is mostly identified by autopsy <sup>3</sup>. We describe a case of a 71-year-old male patient with synchronous double primary cancer. Synchronous double primary malignant neoplasms in a single patient have been well-documented in the

literature. But this is the first synchronous double primary malignant neoplasms of the remnant stomach and gallbladder multifocal carcinoma case which is reported in the literature.

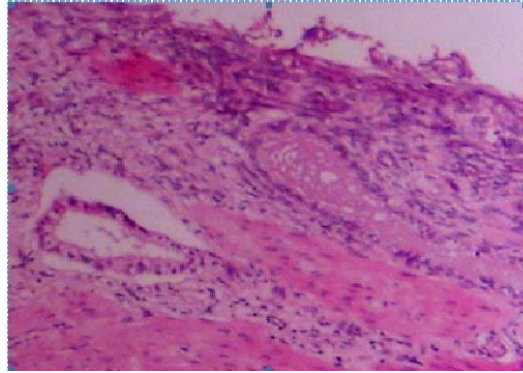
## Case Report

A 71-year-old man was admitted to our hospital because of gastric ulcer detected routinely during a medical checkup. His family history was unremarkable and his medical history included a subtotal gastrectomy with Billroth II anastomosis which had been performed ten years ago because of the peptic ulcer disease. On admission, vital signs were within normal limits. The patient was in good general health and had no significant weight loss. Physical examination revealed no significant findings. Complete blood count and serum biochemistry data on admission showed the following: white blood cell, 8,300/uL; hemoglobin, 10.5 g/dl; hematocrit, 31.3%; platelet, 148000/mm<sup>3</sup>; blood; total bilirubin, 0.7 mg/dl; alkaline phosphatase (ALP), 41 IU/l; aspartate aminotransferase (AST), 23 IU/l; alanine aminotransferase (ALT), 26 IU/l, and amylase 108 IU/l. Viral markers (HBsAg, anti-HBs, anti-hepatitis C virus, anti HIV) were negative. Tumor marker assays showed alpha-fetoprotein was 4.7 n/ml (normal 0-8.1), carcinoembryonic antigen (CEA) was 3.2 ng/ml (normal 0-5), carbohydrate antigen 19-9 (CA 19-9) was 12.8 U/ml (normal 0-37). An ultrasonography scan of the abdomen showed contracted gallbladder with gallbladder stones and gallbladder wall thickening, suggesting chronic cholecystitis without any suspicious of an abdominal metastases. Endoscopy of the upper digestive tract revealed gastric ulcer measuring 2 cm at the posterior wall of the cardia, which was proven to be adenocarcinoma by biopsy. Thus, the preoperative diagnosis was remnant gastric carcinoma and chronic cholecystitis accompanied by gallstones. At laparotomy, the gallbladder was contracted and showed wall thickening. The patient underwent surgical resection of the gallbladder and the total gastrectomy with Roux-en-Y oesophagojejunostomy. The operative and postoperative course was uneventful. The patient was discharged on postoperative day 9. Histopathological examination revealed macroscopically, the gastric tumour was located in the cardia of the stomach on the posterior wall (T3, N1, M0; Stage IIB) and a multifocal tumour was located in the fundus and corpus of the gallbladder (T2, N0, M0; Stage II). The histopathological diagnosis was moderate- differentiated adenocarcinoma in the stomach (Figure 1) and well-differentiated papillary adenocarcinoma in the gallbladder with prominent low and high grade dysplasia response infiltrating the gallbladder wall (Figure 2).



**Figure 1**

Moderate- differentiated adenocarcinoma in the remnant stomach (Hematoxylin and eosin stain, × 100)



**Figure 2**

Well differentiated adenocarcinoma in the gallbladder with prominent desmoplastic response.(Hematoxylin and eosin stain, × 40)

Patient underwent to reoperation and resection of the gallbladder bed (liver segments; 4b and 5), cystic duct remnant, and portal lymph nodes was performed. The histopathological examination for the resected specimen was normal without any tumor. The patient showed no postoperative complication and was discharged on postoperative seventh day. Oncology planned adjuvant chemoradiation therapy because the gastric cancer presented as a T3 N1 M0 lesion with lymphovascular invasion. The patient has been under regular follow-up with clinical examination and liver function test every three months, with surveillance for tumor markers (AFP, CA19-9, CEA) and abdominal CT scan being done at 6 months intervals. The patient is doing well with no evidence of local or distant recurrence more than one years after surgery.

## Discussion

Multiple primary malignant tumors in one patient are relatively rare but multiple synchronous cancers have become more common than in the past because of an increase in the number of elderly patients and also improvements in diagnostic techniques<sup>4</sup>. In reviews of the literature about multiple primary malignant tumors, the overall incident rate of multiple primary malignancies is between 0.73% and 11.7%<sup>4,5</sup>. Three diagnostic criteria have been recommended for multiple primary malignancies: 1) each tumor must present definite features of malignancy, 2) each must be distinct, and 3) the chance of one being a metastasis of the other must be excluded<sup>6</sup>. In our patient, synchronous two different type of tumors were detected and the malignant features were histopathologically proven in each tumor. Accordingly a well- differentiated multifocal adenocarcinoma in gallbladder and moderate- differentiated adenocarcinoma in the remnant stomach were observed in a male patient. These findings might also support the fact that these two cancers occurred in incidental and synchronous manner

Though the mechanism involved in the development of multiple primary cancer has not been clarified, some factors such as carcinogenics, heredity, constitution, environmental factors, viruses, radiological and chemical treatments have been suspected.

The incidence of synchronous and metachronous cancer in gastric cancer patients was 3.4%. Comparing clinicopathological features between patients with another primary cancer and without, the mean age and the proportion of early gastric cancer were higher in the patients also diagnosed with another primary cancer<sup>7</sup>. The prognosis of patients with multiple primary malignant tumors can be depended to the stage of each malignancies. The surgical treatment of choice for synchronous multiple primary malignancies is curative resection of each malignant tumors<sup>8,9</sup>.

In conclusion the possibility of multiple primary cancers should be kept in mind during the preoperative examination and peroperative evaluation of the abdomen especially in older patients.

## References

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