Breast Cancer Metastasis Mimicking Cholangiocarcinoma: A Case Report

Kolanjiokarsinomu Taklit eden Meme Kanseri Metastazı: Nadir Bir Olgu

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ABSTRACT

Breast cancer is the most common tumor and the main cause of death for malignancy in women. Common sites of metastasis include bones, lungs, lymph nodes, liver and brain. Although widespread metastases can compress or infiltrate the bile ducts, direct metastatic involvement of extrahepatic bile ducts are rare. Herein we present a patient with a history of breast cancer who is an exceptional case with metastatic infiltration of extrahepatic bile ducts in the absence of hepatic lesions and any other systemic metastasis.

Key Words: Breast cancer, metastasis, bile ducts

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ÖZET

Meme kanseri kadınlarda görülen en sık kanser olup, kanser nedenli ölümlerin de en önemli nedenidir. Meme kanserinin en sık metastaz yaptığı yerler kemik, akciğer, lenf nodları, karaciğer ve beyindir. Yaygın metastaz yaptığı durumlarda safra kanallarında bası yoluyla tıkanma yapabilse de direk invazyon yoluyla tıkanma oluşturması nadirdir. Burada meme kanseri hikayesi olan ve karaciğerde hiçbir metastatik lezyonu olmadan sadece safra yolu metastazı ile opere edilen hasta sunulmaktadır.

Anahtar Sözcükler: Meme kanseri, metastaz, safra yolları

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INTRODUCTION

Breast cancer is the most common malignancy in women accounting 29% of all female tumors. It is the leading cause of cancer related death among women and the second in general population after lung cancer (1, 2). At the time of diagnosis 10% of the breast cancer patients unfortunately have distant metastasis. Tumor cells can spread through direct way or lymphatic or haematogenous routes. Skeletal system, lungs, lymph nodes, liver and brain are common sites for metastasis (3). Although widespread liver metastases can compress or infiltrate the bile ducts and cause obstructive jaundice, direct metastatic involvement of extrahepatic bile ducts in the absence of hepatic metastasis are rare (4). Herein we report a case that was operated for breast cancer and admitted with obstructive jaundice after 14 months from completing adjuvant therapies and without any hepatic metastatic lesions.

CASE REPORT

A 48-year-old female patient was referred to our clinic from gastroenterology clinic with the diagnosis of cholangiocarcinoma. The patient's main complaint was jaundice. From her medical history we have learned that she had had an operation for right breast carcinoma 14 months ago. The pathology report of right modified radical mastectomy specimen had revealed invasive ductal carcinoma with lymphovasculary invasion. There had been 12 metastatic lymph nodes and the tumor was ER negative, PR negative and C-Erb B2 positive immunhistochemically. Then she had adjuvant chemotherapy and radiotherapy and had been under follow-up since that time with no evidence of distant metastasis.

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On physical examination only jaundice was noticed. In laboratory findings; serum levels of total bilirubin and conjugated bilirubin, ALP, GGT were high (total bilirubin: 14,07 mg/dl; conjugated bilirubin: 11,73 mg/dl; ALP: 385 U/L; GGT: 379 U/L). Tumor marker CA 19-9 was 527,1 U/ml whereas AFP and CA 125 were in normal limits. Magnetic resonance imaging showed a 8x9 mm lesion with heterogeneous contrast, located at portal hilum. The proximal portion of the bile ducts was dilated while distal tract was apparent to be in normal calibration (Figures 1,2). The endoscopic retrograde cholangiopancreatography was unsuccessful so percutaneous trans hepatic cholangiography was performed and external biliary drainage catheter was placed in order to lower down serum bilirubin levels. The patient was operated for Klatskin tumor, Type 2 with conjugated bilirubin level of 1,91 mg/dl. During the exploration no other tumor deposits was detected and choledoc resection + cholecystectomy + hepaticojejunostomy were performed with negative surgical borders verified by consecutive frozen-sections. The patient's postoperative course was uneventful and she was discharged at postoperative 7th day with normal liver function tests. The definitive pathology was malign epithelial tumor, morphologically and immunhistochemically concordant with breast carcinoma metastasis. The patient has been under chemotherapy treatment since recovery with multiple liver metastasis detected 4 months after the operation.

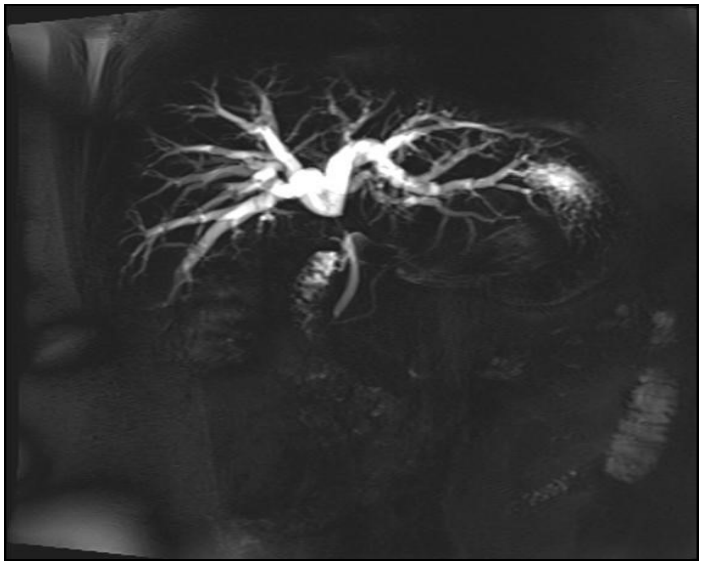


Figure 1: Magnetic resonance imaging showed an 8x9 mm lesion with heterogeneous contrast, located at portal hilum. The proximal portion of the bile ducts was dilated.

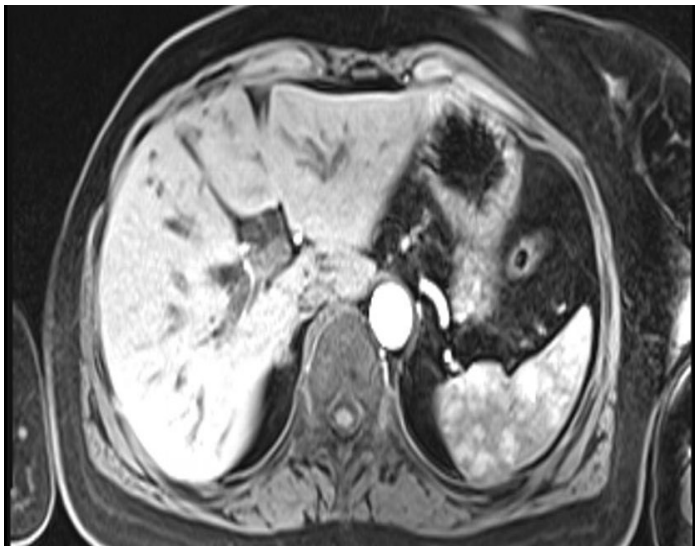


Figure 2: The craniocaudal size of liver is in normal limits. The signalling of liver parenchyma is homogeneous and no cystic or solid lesions were detected after iv contrast injection.

DISCUSSION

In the presence of another primary malignancy, it is difficult to establish the definite diagnosis for the bile duct stenosis prior to surgery even with several imaging studies. Although biliary strictures and biliary duct stones are the most common causes of biliary obstruction, cholangiocellular carcinoma and metastatic lesions cannot be excluded.

Actually skeletal system, lungs, liver and brain are common sites for breast cancer metastasis but every site of the body can be targeted (3). Even though breast cancer metastasis to the digestive tract, kidneys and retroperitoneal organs are rare, they have been occasionally reported. The biliary tract is effected rarely by metastasis, and if so, colorectal cancer is the most frequent malignancy involved (5). Breast cancer can cause obstructive jaundice by multiple liver metastases, compression by enlarged lymph nodes, infiltration of the bile ducts by tumor or when the head of pancreas is targeted (5). Direct metastatic involvement of extrahepatic bile ducts in the absence of hepatic metastasis is rare. Popp et al. report the largest series in the literature with seven cases of breast cancer patients who underwent surgery for obstructive jaundice caused by metastasis (6). In this report; the etiology of jaundice in patients were reported as liver metastasis in two patients, compression of bile tract by enlarged lymph nodes in six patients and direct metastasis to the bile duct only in one patient. The common site in most of the cases is that the diagnosis was not achieved or suspected before the surgery except the two cases reported by Rego et al which preoperative diagnosis was achieved by endoscopic biopsies (7).

CONCLUSION

The present case provides some information about metastatic breast cancer, which can target extrahepatic bile ducts without liver involvement. In this patient with a history of breast cancer, the etiology in biliary obstruction could not be diagnosed preoperatively despite several radiological imaging studies, and with the absence of liver metastasis aggressive surgical approaches were performed without hepatic resections. During the surgery, frozen sections should be obtained and the pathologist should be informed about the medical history of the patient.

Conflict of interest

No conflict of interest was declared by the authors.

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