



Colon Carcinoma Metastasizing to Skin and Breast - Rare Metastasis Sites: A Case Report

Meme ve Cilde Metastaz Yapan Kolon Kanseri - Nadir Metastaz Alanları: Olgu Sunumu

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ABSTRACT

Colorectal cancer (CRC) is the third most common cancer in the world and second most common cause of cancer mortality after lung cancer. Metastasis to the regional lymph nodes are found in 40–70% of cases at the time of resection, with metastasis to more distant sites occurring most frequently in the liver, peritoneal cavity, and lung, followed by the adrenals, ovaries, and bone. It is a rare case for a CRC to metastasize to skin and breast and that indicates advanced disease. In this case we reported a 64-year-old female CRC patient presenting with cervical and intra abdominal lymph nodes metastases a short time after adjuvant chemotherapy treatment and subsequent developing breast and diffuse skin metastases at initial of new cure chemotherapy. Because of skin and breast metastases related to colorectal cancers are so rare we try to inform this case to literature.

Key Words: Colorectal cancer, Breast metastasis, Skin metastasis

ÖZ

Kolorektal kanser dünya çapında en sık görülen üçüncü ve akciğer kanserinden sonra en sık ölüme neden olan ikinci malignitedir. Rezeksiyon sırasında hastaların %40-70'inde reyonel lenf nodu metastazı varken, uzak metastazlar en sık karaciğer, peritoneal kavite ve akciğere, daha nadir olarak da adrenaller, overler ve kemiklere olmaktadır. Bu olguda 64 yaşında kolon kanseri nedeniyle adjuvan kemoterapi alan kadın hastada kısa süre sonra gelişen servikal ve intraabdominal lenf nodu metastazı gelişmesini ve yeni başlanan kemoterapi rejiminden kısa süre sonra meme ve cilt metastazı gelişmesini rapor ettik. Kolorektal kanserlerde meme ve cilt metastazlarının çok nadir olması nedeniyle bu olguyu literatüre bidirmek istedik.

Anahtar Sözcükler: Kolorektal kanser, Meme metastazı, Cilt metastazı

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INTRODUCTION

Colorectal cancer the third most common cancer in the world and second most common cause of cancer mortality after lung cancer. The risk for colorectal cancer increases with age, but 3% of colorectal cancers occur in patients younger than 40 years of age. Multiple factors like polyps, diet, inflammatory bowel disease, genetics and smoking drive the transformation of healthy colorectal mucosa to cancer. Genetic and environmental factors, such as maintaining a low body mass index and exercising regularly, correlate with lower incidence rates. Metastases to the regional lymph nodes are found in 40–70 % of cases at the time of resection, with metastases to more distant sites occurring most frequently in the liver, peritoneal cavity, and lung, followed by the adrenals, ovaries, and bone (1). It is a rare case for a CRC to metastasize to skin and breast and that indicates advanced disease. Breast metastasis of CRC is an uncommon case with a poor prognosis. The development of breast metastases is exceptionally rare, account for 0.43 % of all breast malignancies and is associated with poor clinical outcome (2). It is reported that skin

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metastasis may occur in cancer patients with an incidence of 0,7 % to 5 % and in some cases incidence is found to be 9 % (3,4). In this case we reported a 64-year-old female CRC patient presenting with cervical and intra abdominal lymph nodes metastase a short time after adjuvant chemotherapy treatment and subsequent developing breast and diffuse skin metastase at initial of new cure chemotherapy. Because of skin and breast metastase related to colorectal cancers are so rare we try to inform this case to literature.

CASE REPORT

A 64-year-old female presented to hospital complaining with abdominal pain and constipation in april 2013. On physical examination there was a sensitivity in the bilateral lower part of the abdomen. In laboratory examinations blood test showed anemia consistent with iron deficiency. Because of she was postmenopausal a colonoscopy was performed for a suspicious malignancy of colon. In colonoscopy an ulserovegetan mass lesion surrounding the lumen was detected in the middle of transverse colon and biopsy specimens were taken. Pathologic examination revealed a poorly differentiated colon adenocarcinoma. At the time of the diagnose toracoabdominal screening showed no distant metastase so patient underwent of segmenter colon resection and pathologic staging after surgery was consistent with T3N2M0 disease. Patient was referred to our clinic for further medical treatment and follow-up care. She was commenced on FOLFOX-6 (folinic acid, 5-fluorouracil, oxaliplatin) chemotherapy regime once a 14 day in april 2013 and 6 cycles of chemotherapy were completed in November 2013. On follow up, a short time later patient represented to our clinic with abdominal discomfort, fatigue and severe body pain. A new thoracoabdominal Computed Tomography was planned for the patient to evaluate if there was a progression of disease. Previously absent multiple lymph nodes which were thought to occur by lymphatic spreading were detected in mediasten, intra abdominal and parenchyma of lung. Thoracoabdominal computed tomography also showed a peritoneal and colonic wall thickness which was consistent with disease progression. Patient was discussed at multidisciplinary team meeting in our department and it was decided to perform a new colonoscopy and Positron Emission Tomography - Computed Tomography (PET/CT) screening to evaluate these new emerging lesions whether its a progression or a second primary tumor. An increase metabolic activity was revealed in PET/CT screening in the mediastinal, intra abdominal and bilateral supraclavicular lymph nodes and in the wall of transverse colon. Colonoscopy showed a new lesion size of 3x2 cm which is protruded to lumen and covered with exudation in the remaining section of transverse colon. Biopsy specimen was consistent with adenocarcinoma of colon .In the view of these findings, patient was accepted as a metastatic colon cancer at the

multidisciplinary team meeting and due to K-RAS test was mutant, FOLFIRI(Folnic acid, 5-Fluorouracil, Irinotecan) + bevacizumab treatment was commenced on. After the first cure of chemotherapy on the follow-up, patient represented to clinic with new lesions on her body. On physical examination it was detected that previous lymph nodes were enlarged and new subcutaneously lesions were noted in the right hip, right arm and umbilicus. New pathologic examples were taken from the biggest supraclavicular lymph nodes and from the biggest subcutaneous arm lesion. Pathologic diagnosis revealed malignant epithelial tumor metastasis with CK-20 positive staining. Patient was continued on her chemotherapy but during her treatment new nodal masses occurred in bilateral breast consistent with metastasis in ultrasound imaging (Figure 1A,B). Patient did not accept any further treatment with her request, then she was followed-up with best supportive care. Unfortunately she died in may 2014.

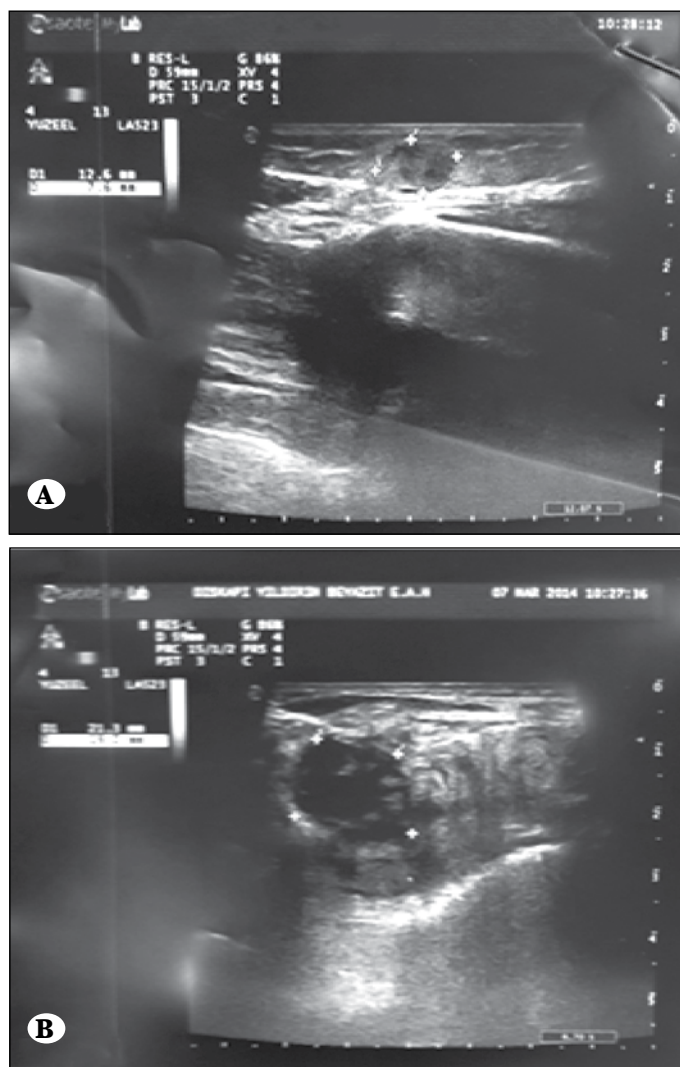


Figure 1: Ultrasound Image of metastatic breast lesions. Please attention the lesions on the ultrasound images being smooth border and well damarcated.

DISCUSSION

It is uncommon for colorectal cancers to metastasize to skin and breasts and this type of metastasis is associated with advanced disease and poor prognosis. Because of breast cancers are generally primary tumors and metastasis to breast is very rare, the breast mass sometimes can be considered as primary tumors by mistake and unnecessary surgical interventions can be made (5,6). The malignancies which metastasize to breast are characterized with rapid growing and easily palpable mobile masses and they do not cause nipple retraction, breast skin changes and bloody nipple discharge (6). Mammography may help us in distinction of primary and secondary lesion of breast. Metastatic lesions in breast are seen around and well-demarcated in mammography on the other hand spiculated, microcalcification and skin changes are not expected. It is recommended that to avoid surgical operations in the case of presenting these symptoms (7). In a study, Barthelmes et al. advocated to avoid unnecessary surgical interventions because of short survival expectation and risk of skin planting (8). Skin metastasis is very rare as the breast metastasis and indicators of poor prognosis. It generally emerges in the first 2 year after primary tumor resection and may occur concurrent with lung, liver and peritoneal metastases (9). Although skin metastasis related with colorectal cancer mostly occurs on the

abdominal skin (especially arises from surgical incision scars), it can also be seen on the thoracic, pelvic, head and neck skin (10,11). Much less frequently skin lesions of colorectal cancer can present on face, scalp, nose, forearm, genital area, ankles and toes (4,9,11,12). Skin lesions are generally in the form of hard, mobile and painless masses. It can be presented in different morphologies mimicking like epidermal cyst, neurofibroma, lipoma, scleroderma-like plaques, alopecia and lymphoma (4,13). In isolated lesions wide local excision is recommended, palliative approach is essential in the widespread metastases.

CONCLUSION

If a patient previously diagnosed any kind of malignancy presents with skin and breast lesions which are round and painless, as possible metastasis should be considered. Multiple breast lesions characterized with painless round shaped, no nipple and skin changes and radiologically containing no microcalcification should be considered as a metastasis and should be avoided from unnecessary surgical interventions like radical mastectomy. It should also be remembered that skin metastasis of cancer can be in different morphologies and if necessary a biopsy should be performed from skin lesion to exclude a metastasis at a patient previously diagnosed with malignancy.

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