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Image Presentation

Ulcerated Breast Cancer: How Fear Led to Delayed Diagnosis?

Ülserli Meme Kanseri: Korku Tanının Gecikmesine Nasıl Yol Açtı?

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Abstract

Diagnosing breast cancer in its early stages is crucial for improving treatment outcomes and overall survival rates. Despite ongoing efforts to raise awareness about breast cancer and establish national screening programs, the fear of undergoing mastectomy remains a significant obstacle, resulting in delayed diagnosis. Various socioeconomic and cultural factors prevalent in diverse societies can impact patients' behaviors towards seeking timely medical attention for diagnosis. Breast cancer patients often face obstacles such as inadequate emotional support, communication barriers, and limited access to counseling services. This case report highlights the imaging features of a 56-year-old patient who presented with a 15 cm ulcerated mass in her right breast and delves into the factors causing to the delayed diagnosis.

Anahtar Kelimeler
meme kanseri
ülserli meme kanseri
invaziv duktal
gecikmiş tanı

Özet

Meme kanserini erken evrelerinde teşhis etmek, tedavi sonuçlarını ve genel sağ kalım oranlarını iyileştirmek için çok önemlidir. Meme kanseri hakkında farkındalığı artırma ve ulusal tarama programları oluşturma yönündeki devam eden çabalara rağmen, mastektomi geçirme korkusu önemli bir engel olmaya devam etmekte ve gecikmiş tanıya neden olmaktadır. Çeşitli toplumlarda yaygın olan çeşitli sosyoekonomik ve kültürel faktörler, hastaların tanı için zamanında tıbbi yardım arama davranışlarını etkileyebilir. Meme kanseri hastaları genellikle yetersiz duygusal destek, iletişim engelleri ve danışmanlık hizmetlerine sınırlı erişim gibi engellerle karşı karşıya kalmaktadır. Bu vaka raporu, sağ memesinde 15 cm ülserli kitle ile gelen 56 yaşındaki bir hastanın görüntüleme özelliklerini vurgulamakta ve gecikmiş tanıya neden olan faktörleri araştırmaktadır.

67-year-old female patient presented with a sizable mass in her right breast accompanied by a large ulcer, significant exudation, bleeding, and a malodorous discharge (Figure 1). She had no familial history of breast cancer and resided with her family in an urban area with convenient access to medical facilities. The patient was covered by comprehensive health insurance. Despite this, she had managed to conceal the mass from her family members. She reported that the mass had recently appeared in her medical history and that she had been using herbal remedies in the hope that it would resolve on its own. When questioned about the delay in seeking medical attention, she expressed her apprehension about a potential breast cancer diagnosis and discomfort with the idea of undergoing a mammogram.

Mediolateral oblique (MLO) mammography was not performed due to the ulceration to the ulceration, pain, and intermittent bleeding of the mass. Microcalcifications were observed on craniocaudal (CC) mammography (Figure 2a,b). Subsequent to this, an ultrasound assessment identified a mass predominantly affecting the right breast; however, its dimensions could not be accurately determined due to significant skin necrosis and ulceration.

Breast Magnetic Resonance Imaging showed the precise dimensions of the mass and revealed infiltration of the skin, nipple, and posterior pectoral muscles (Figure 3a,b). Maximum Intensity Projection (MIP) and Volume Rendering (VR) images exhibited a dilated widely branching feeding artery (Figure 4a,b). Subsequent histopathological examination confirmed the presence of high-grade (grade III) HER2-positive invasive ductal carcinoma, characterized by negative expression of ER, PR, and p53. Moreover, CerbB2 exhibited widespread positivity, and the Ki67 proliferation index was 30% (Figure 5). PET/CT results indicated metastasis to various sites, including lymph nodes, liver, bones, and brain. Despite undergoing chemotherapy, the patient succumbed to the disease six months later.

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Figure 1: The patient presented with a large right breast mass and an associated giant ulcer, with massive exudates, and bleeding. The tumor was approximately 15 cm in size with extensive necrosis (The image is anonymized to protect the patient's privacy).

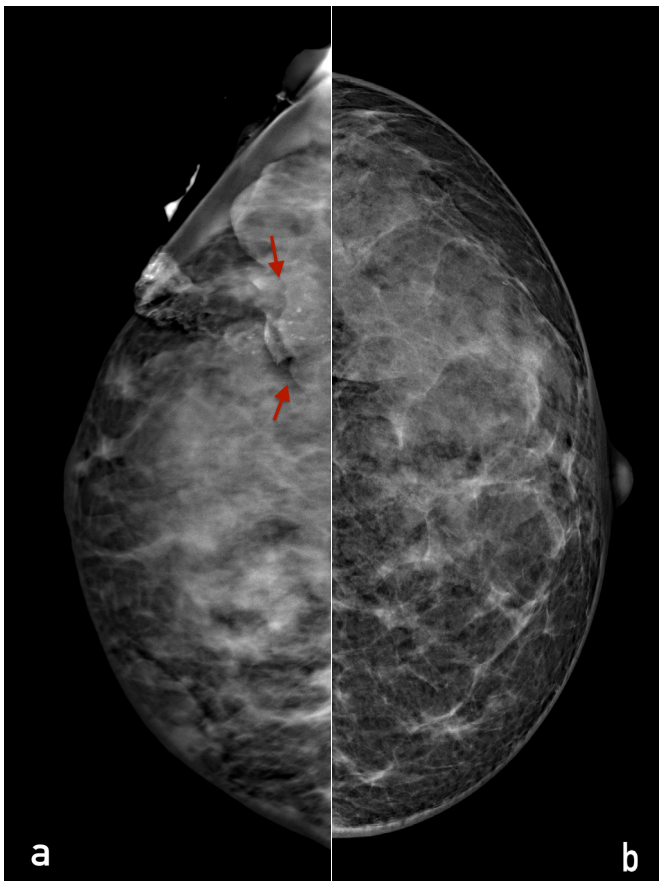

Figure 2: a,b) Both breasts had a dense breast pattern, and microcalcifications were observed on CC mammography (red arrows). Since the right CC mammography cannot be compressed sufficiently, its resolution is lower than that of the left**.**

Breast cancer is the most prevalent cancer among women worldwide. The timely detection and intervention are crucial in enhancing the prognosis for individuals dealing with breast cancer. Despite continuous efforts to raise awareness about breast cancer and implement national screening programs, the fear of mastectomy significantly contributes to delayed diagnosis (1). Regrettably, there are still cases where patients are diagnosed with advanced-stage (2). Women tend to fear developing breast cancer more than other types of cancer or diseases. It is noteworthy that women are four times more

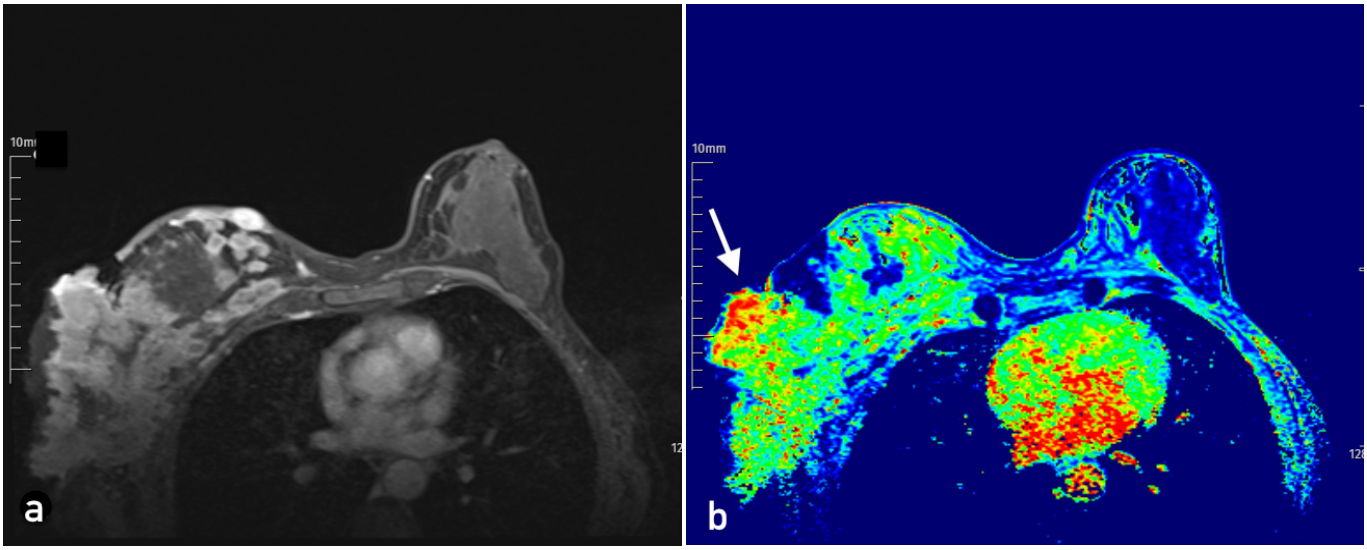

Figure 3: a) Dynamic Contrast-Enhanced Breast MRI shows; A mass approximately 15 cm in diameter in the right breast: invasion of the nipple, skin, pectoral muscle and multiple metastatic lymph nodes are present**. b)** Type 3 washout areas are widely observed within the mass (white arrow).

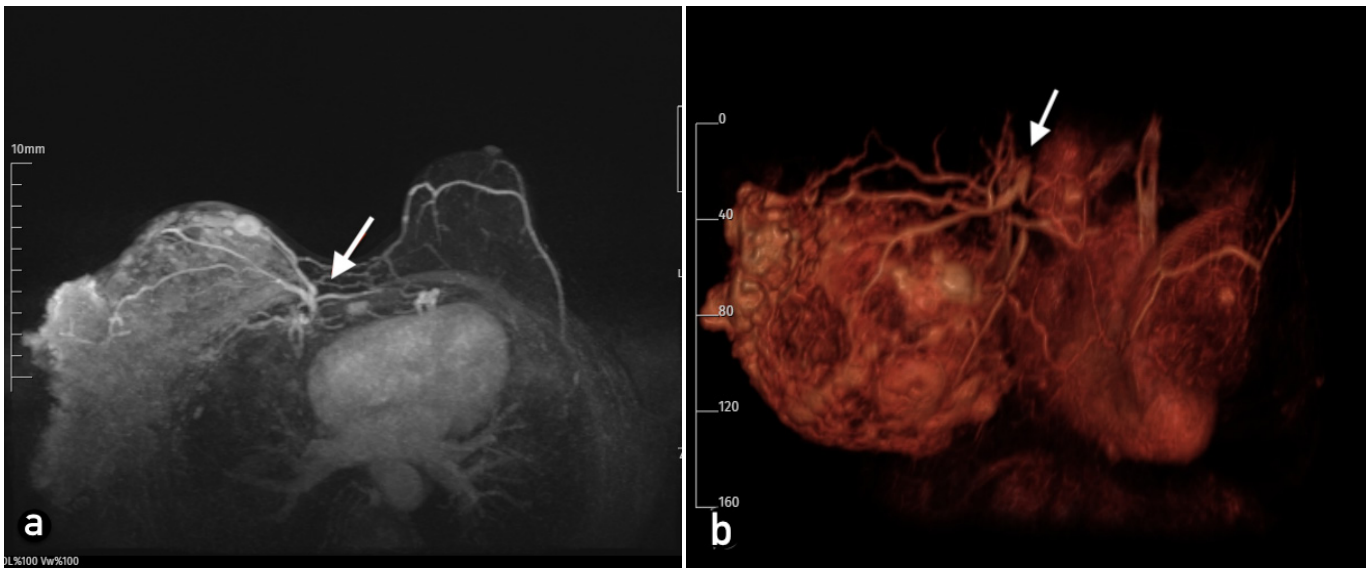

Figure 4: a) Maximum Intensity Projection, and **b)** Volume Rendering images shows a dilated widely branching feeding artery (white arrows).

likely to die from coronary heart disease
than from breast cancer. What is the origin of this exaggerated fear of developing breast cancer and the subsequent mortality associated with it?

The fear associated with mammography may stem from insufficient information provided in promotional and marketing campaigns, which often emphasize and possibly exaggerate the benefits of early breast cancer detection through mammography (3). Additionally, societal reluctance towards mammography as an uncomfortable procedure might lead to delayed diagnoses win older and married women. On the contrary, research suggests that younger women and individuals with a family history of breast cancer demonstrate proactive behaviors towards early detection driven by fear (4).

In various societies, patient diagnostic behaviors are influenced by socioeconomic and cultural factors. Patients often resort to prayer camps and herbal remedies, which can lead to delays in diagnosis and treatment. This delay may be attributed to a lack of knowledge about breast cancer and infrequent follow-ups among patients with low socioeconomic status, resulting in delayed and poorer diagnoses (1,5). In the case under discussion, the patient chose alternative treatment methods. Breast cancer patients may also encounter difficulties in accessing adequate emotional support, effective communication, and counseling (6).

Addressing and resolving these treatment challenges require interventions at multiple levels, such as culturally tailored education and psychosocial enhancements in healthcare systems. The implementation of suitable psychosocial support is essential.

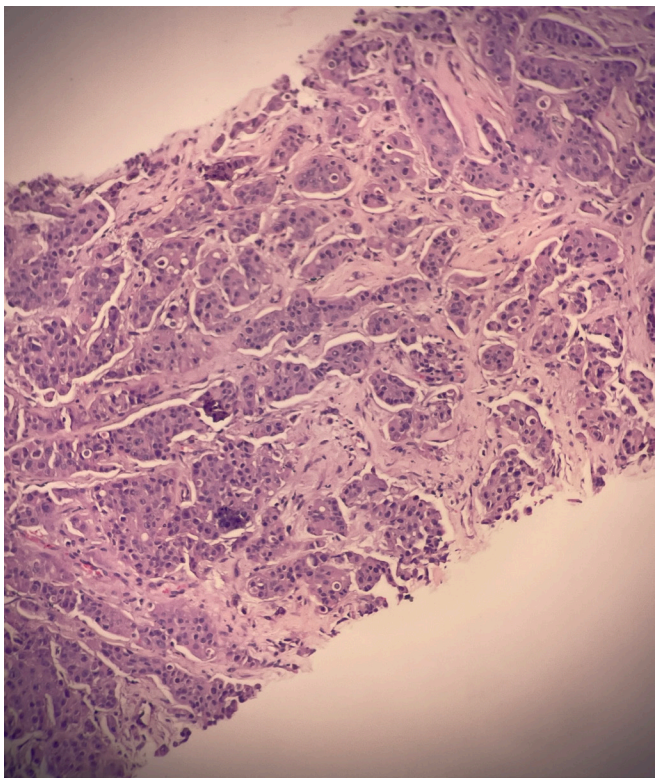

Figure 5. Haematoxylin and eosin stain at x200 magnification: Invasive Ductal Carcinoma, high nuclear grade III, mitosis: 2, tubules: 3. Immuno- histochemical staining showed that the biopsy specimen was ER and PR -, Her2:+3, Ki67: 30%.

Ethical Approval and Consent: An informed consent has taken from the patient's relatives.

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