INTERESTING IMAGE

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Lymphangiosarcoma: A Tumoral Lesion Developing on the Forearm After Mastectomy

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Keywords: Forearm, nodule, lymphangiosarcoma

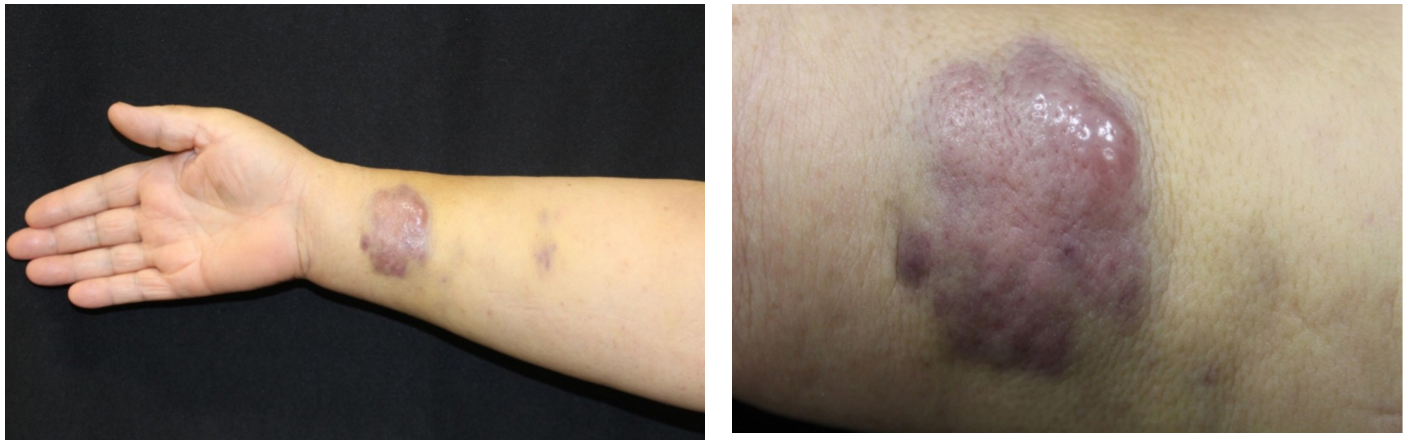

Figure 1. The indurated, irregular, blue-purple hard nodular lesion on the right forearm.

A 77-year-old female patient was admitted to our clinic due to swelling on the right forearm. The patient was diagnosed with breast cancer 10 years ago, and mastectomy was underwent. Additionally, all of the lymph nodeswere removed. After that chemotherapy and radiotherapy were performed. In her dermatological examination, an indurated hard nodular lesion, approximately 5x5 cm in size, with irregular blue-purple borders was found on the ventral surface of the right forearm (Figure 1) (Necessary permissions were obtained from the patient and her children for verbal and visual sharing of the case).

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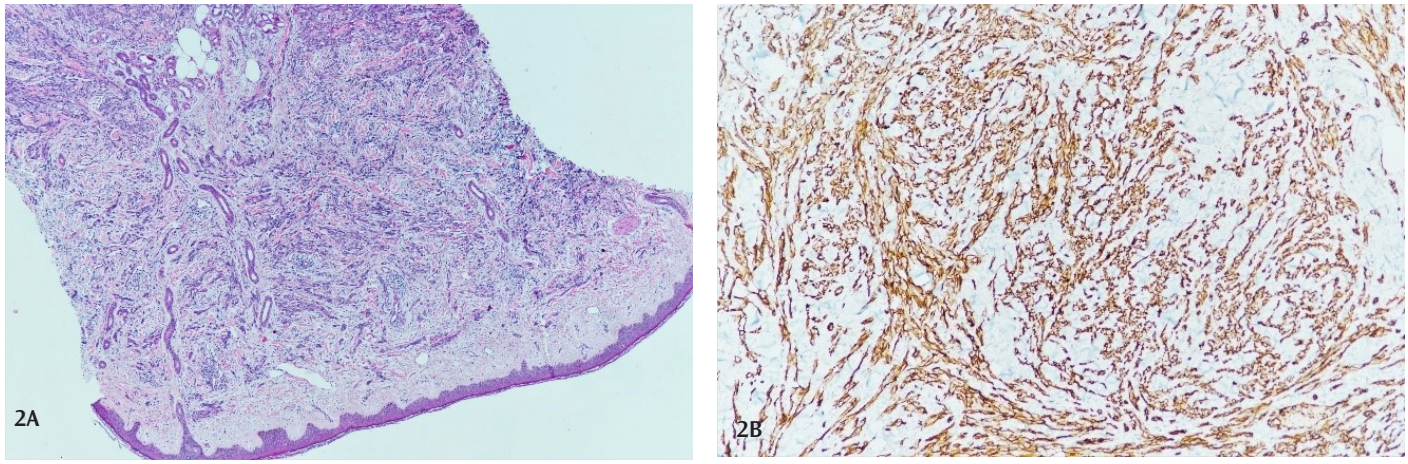

Figure 2. (A, B) Histopathological image of the biopsy sample taken from the patient at 40 and 100 magnifications.

A 4mm punch biopsy sample was obtained from the lesion. Anastomosing vascular channel structures with infiltrative architecture located in the dermis were observed, HE staining x40 (Figure 2A). Tumor cells with sometimes spindle-like, sometimes epithelioid appearance, pleomorphic, high atypia, and high mitotic activity were observed, Ki67 staining x100 (Figure 2B). Immunohistochemical examination revealed CD31 (scytek/EP78) positive, CD34 (Leica/ QBEnd-10) negative, Factor8 positive, D2 40 (/Cell-Marque/monoclonal positive, CKPan (BioGenex/AE1-AE3) negative, HHV-8 (Cell-Marque /13b10) negative, Ki67 (Cell marque-SP6) 45-50% were detected (X20). The patient was diagnosed with lymphangiosarcoma based on these findings. She was referred to the Plastic Surgery Department for the operation. Our patient underwent "Transhumeral Amputation" in the plastic surgery department. The post-operative photo of the patient is shown in Figure 3.

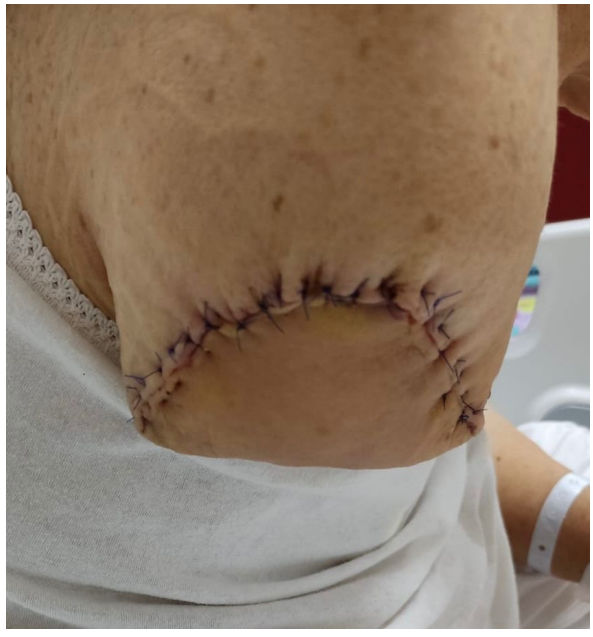

Figure 3. Image of the patient's arm a few days after the operation.

In cancers of bone and soft tissues, amputation may be performed for therapeutic purposes in cases where the tumor cannot be separated from the surrounding normal tissues. Transhumeral amputation can occur at any length of the humerus. The ideal level is 4-5 cm proximal to the elbow joint (1,2). Closed amputation; It is performed if there is enough skin tissue to cover the wound in the amputated area. After surgical limb amputation, the tissues and skin in the surgical wound are closed, and the amputation process is completed. Without leaving any open wounds (1,2). This surgical technique was also used in our case. In the literature, malignancies such as Kaposi's sarcoma, squamous cell carcinoma, and malignant lymphoma and melanoma may develop on the basis of chronic lymphedema have been indicated (3,4). The development of lymphangiosarcoma has been reported in 10% of patients with lymphedema on the arms after mastectomy and lymphadenectomy. It is commonly used in seen on the proximal upper extremity, forearm, elbow, and anterior chest wall (5,6). The time from the formation of lymphedema to the development of lymphangiosarcoma is reported as approximately 5-27 years (7). In our case, this period was 10 years. Patients with lymphedema on their arms, especially after mastectomy, should be closely followed, and the necessary tests and examinations should be performed in the presence of suspicious lesions. Early diagnosis and treatment significantly affect patient prognosis and increase the chance of survival.

Ethics

Informed Consent: Necessary permissions were obtained from the patient and her children for verbal and visual sharing of the case.

Footnotes

Authorship Contributions

Surgical and Medical Practices: E.H.T., S.Ö.A., Concept: E.H.T., S.Ö.A., Design: E.H.T., S.Ö.A., Data Collection or Processing: E.H.T., S.Ö.A., Analysis or Interpretation: E.H.T., S.Ö.A., Literature Search: E.H.T., N.Ö., S.E., S.T., İ.O.T., S.Ö.A., Writing: E.H.T., S.Ö.A.

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REFERENCES

1. https://read.qxmd.com/read/19730305/targeted-reinnervation-for-transhumeral-amputees-current-surgical-technique-and-update-on-results?redirected=slug
2. https://read.qxmd.com/read/26527583/functional-and-clinical-outcomes-of-upper-extremity-amputation?redirected=slug
3. Mizuno S, Yamada Y, Yamada K, Nomura N, Wakamatsu N. Clinical variability in a Japanese hereditary lymphedema type I family with an FLT4 mutation. Congenit Anom (Kyoto). 2005;45:59-61.
4. Szuba A, Rockson SG. Lymphedema: classification, diagnosis and therapy. Vasc Med. 1998;3:145-56.
5. Komorowski AL, Wysocki WM, Mituś J. Angiosarcoma in a chronically lymphedematous leg: an unusual presentation of Stewart-Treves syndrome. South Med J. 2003;96:807-8.
6. Chung KC, Kim HJ, Jeffers LL. Lymphangiosarcoma (Stewart-Treves syndrome) in postmastectomy patients. J Hand Surg Am. 2000;25:1163-8.
7. Aygit AC, Yildirim AM, Dervisoglu S. Lymphangiosarcoma in chronic lymphoedema. Stewart-Treves syndrome. J Hand Surg Br. 1999;24:135-7.