



Metastatic Malign Melanoma of Supraspinatus Muscle

Supraspinatus Kasında Malign Melanom Metastazı

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To the Editor,

Malignant melanoma, which occurs by malignant transformation of melanocytes that originate from the neural crest, is one of the most aggressive neoplasms of the skin, and it constitutes 4% of skin cancers (1). Malignant melanoma may spread to all organs, like skin, lungs, distant lymph nodes, pleura, liver, central nervous system, skeleton, subcutaneous sites, gastrointestinal tract, heart, adrenal glands, kidney, and thyroid gland, with different frequencies (2). The frequency of metastasis to the skeletal muscles in patients with malignant melanoma is very low (3). Here, we present a case of malignant melanoma that metastasized to the supraspinatus muscle who presented with shoulder pain.

A 78-year-old female patient presented with unrelenting shoulder pain mimicking rotator cuff pathology. She had a 4-month history of pain, which was localized to the left shoulder and increased gradually. On physical examination, her shoulder movement was limited due to pain. The patient had a positive Neer sign. There was tenderness with palpation of the supraspinatus. A scar on the back of the patient was inspected. When her medical history had been questioned in more detail, she told us that she had a history of malignant melanoma on her back 30 years ago that was excised and caused no symptoms until that time. The patient also complained about exhaustion with daily activities. No lymph node enlargement in the cervical or axillary region was detected. Erythrocyte sedimentation rate was 24 mm/h (normal <20 mm/h), and other blood tests were normal. Shoulder magnetic resonance imaging (MRI) was performed. It revealed a mass showing contrast uptake in the supraspinatus

muscle and contrast uptake in multiple lymph nodes in the axillary and supraclavicular regions (Figure 1). Thereafter, a positron emission tomography (PET) image was taken. The PET was consistent with multiple metastases to the subacromial region and axillary lymph nodes. The biopsy of the lesion confirmed the diagnosis of malignant melanoma. She was referred to an orthopedic surgeon.

Malignant melanoma, which could have a large variation of aspects, can spread anywhere in the body, and it mostly often spreads loco-regionally into the skin, subcutaneous tissue, and lymph nodes, and then it goes into distant organs - in the order of subcutaneous fat, lungs, liver, brain, bones, and intestines (3,4). Neighboring muscle tissue is also a target for malignant melanoma metastases. Malignant melanoma may

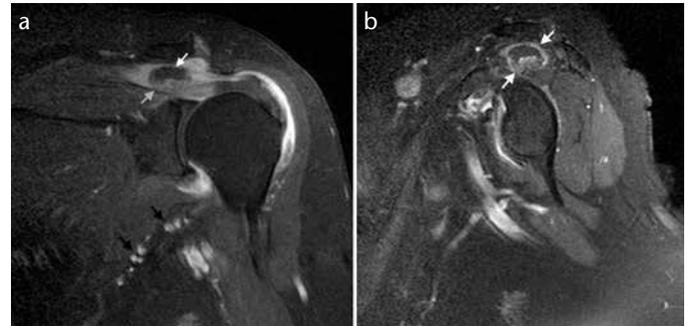


Figure 1. a, b. T1 weighted spir MRI of the left shoulder in coronal (a) and sagittal (b) planes displays a mass showing contrast uptake in supraspinatus muscle (gray arrows) and axillary lymph nodes (black arrows)

exhibit metastasis late, even years, like in the present case. Ultrasound, CT, and MRI have the capability of determining nodal and distant metastases (5). The use of PET scanning may increase the possibility of detection of muscular metastases. Metastatic malignant melanoma, which may arise many years after primary disease, may be seen in the musculoskeletal system. Clinicians should be aware of this rare neoplastic condition and the benefits of musculoskeletal imaging methods, like MRI and PET, to detect it.

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