

Primary Malignant Melanoma Of Male Breast – Case Report

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Introduction

Malignant melanoma can occur in the skin, mucous membranes, and the choroid. Primary malignant melanoma of the breast is very rare, representing less than 5% of all melanomas and under 0.5% of malignant breast tumours. The aetiology of malignant melanoma is unknown, though ultraviolet radiation exposure is a suspected risk factor. Malignant melanoma of the breast can manifest in four main ways: primary melanoma of the breast skin, metastasis to the breast, in-transit metastases to breast tissue and skin, and primary melanoma of the breast gland.

Case Summary

This is a case of a 78-year-old male with a right breast mass, with no history of radiation exposure or any skin lesions. Clinical examination revealed a hard right breast lump (P4 suspicious) with no nipple involvement, mole, or palpable axillary lymph nodes. Ultrasound imaging showed a heterogeneous, lobulated solid mass measuring 45x22 mm in the upper outer quadrant of the right breast with internal vascularity (U4 suspicious). Core biopsy of the lesion revealed pleomorphic cells with brown pigment. Immunohistochemistry showed positive staining for Melan A and S100, confirming malignant melanoma. There was negative staining with MNF 116. Further CT imaging identified pleural and pulmonary metastases, precluding surgical intervention. On PET CT scan, the breast lesion demonstrated intense FDG avidity. The patient underwent palliative chemotherapy and radiotherapy as the first line of treatment. The patient passed away two years following the initial diagnosis.

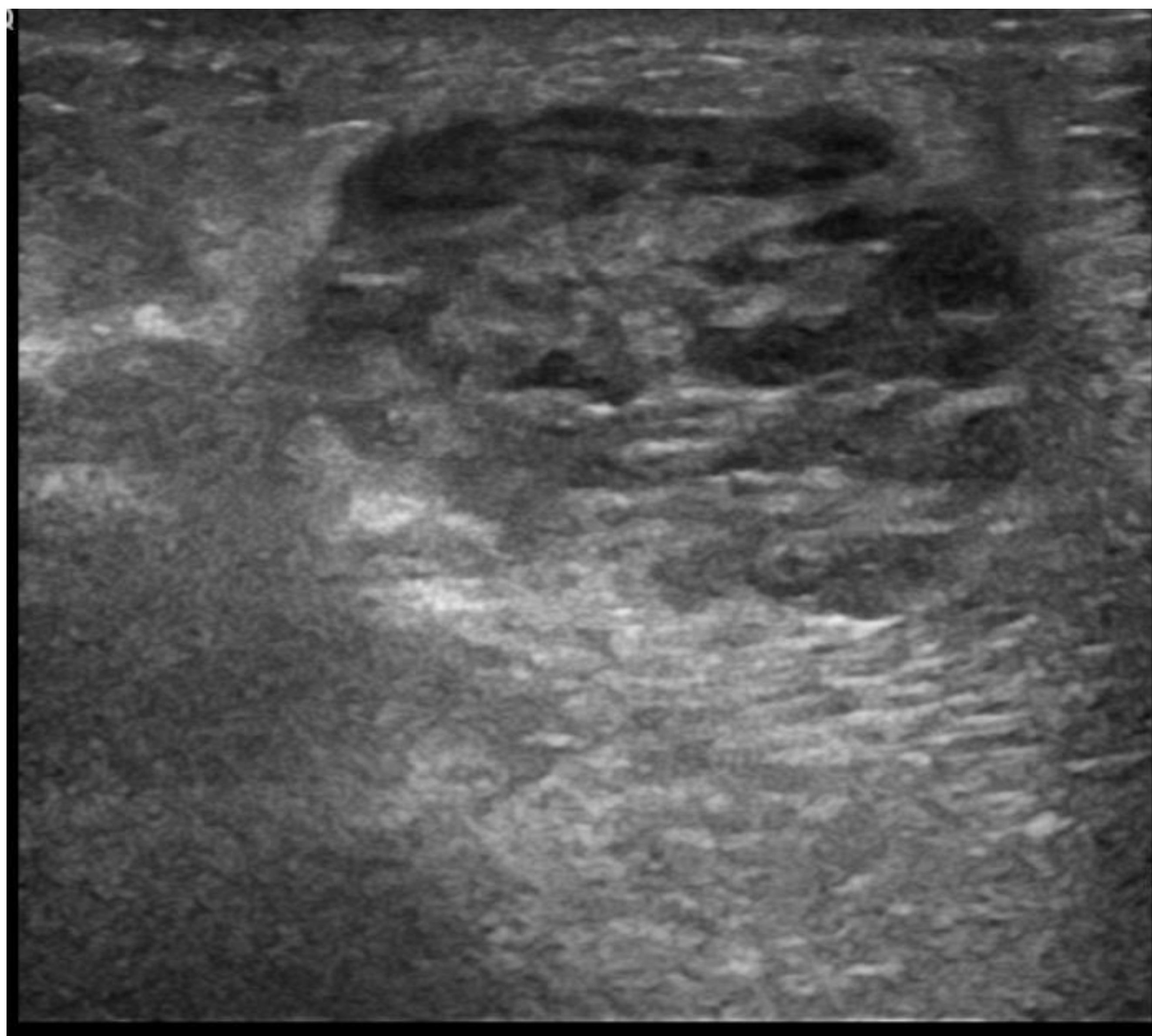


Figure 1: US Scan shows a mass lesion in the right breast with heterogeneous echotexture and mild posterior enhancement.

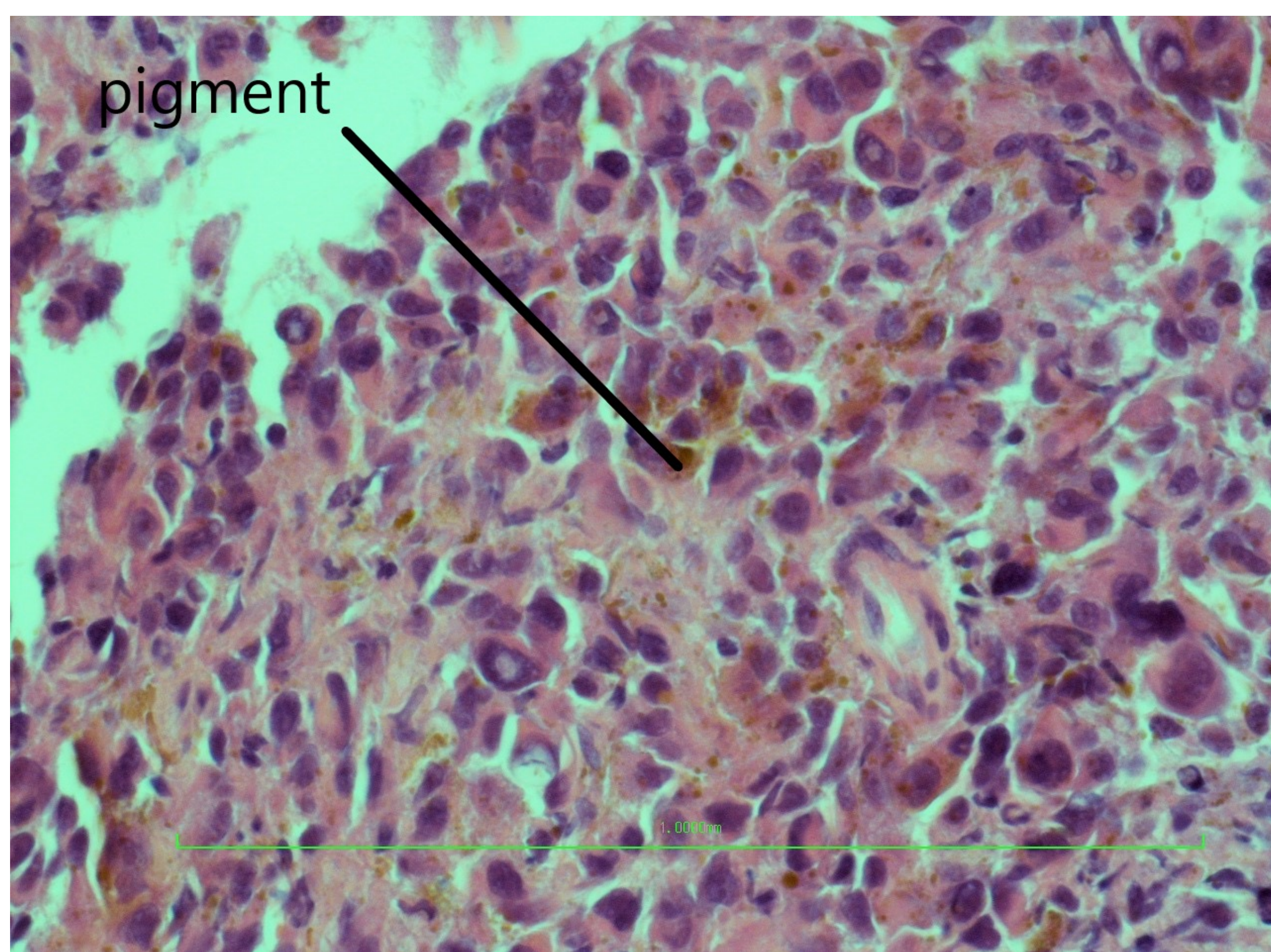


Figure 2: Right breast core biopsy shows pleomorphic cells with brown pigment.

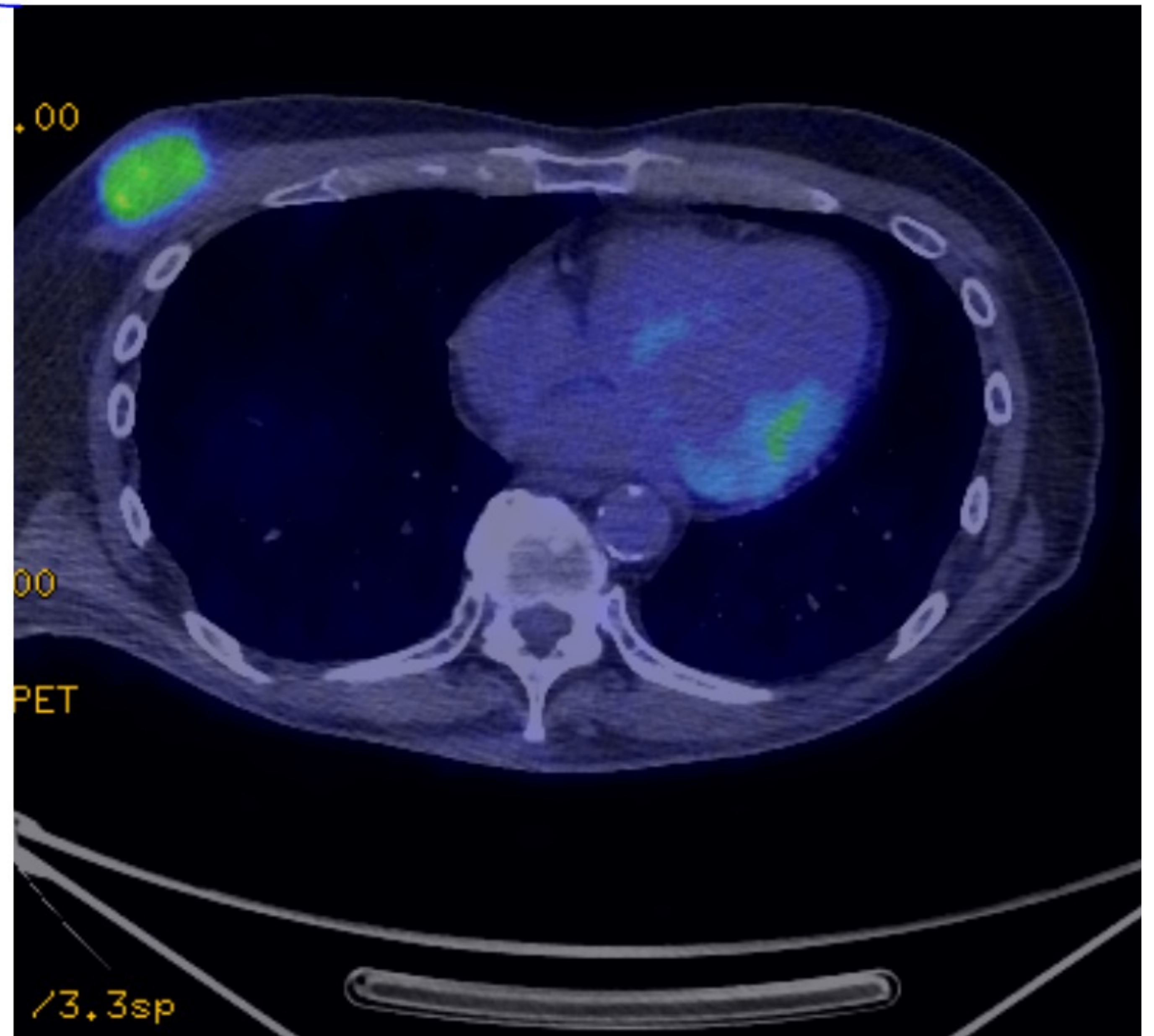


Figure 3: FDG PET CT scan: The lesion in the right breast shows intense FDG avidity on this axial image and is attached to the underlying pectoralis muscle.

Discussion

Primary malignant melanoma of the breast is a rare entity with a poor prognosis. Its occurrence in the male breast is even rarer. Early detection and diagnosis are crucial for surgical excision and improving patient outcomes. Triple assessment (through clinical evaluation, imaging via US and mammogram as well as core biopsy) is the main method of diagnosis for all breast lesions.

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