

Unveiling the unexpected: An Incidental Discovery of a rare Breast Tumor on CTA-A Case Report.

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Introduction:

Myofibroblastoma (MFB) is a rare mesenchymal tumor that belongs to the family of "benign spindle cell tumors" of the mammary stroma (1). It accounts for less than 1% of all breast tumors (2). MFB usually affects older males and postmenopausal females. It is often asymptomatic and typically presents as a painless, slow-growing mass. Here, we report an incidental discovery of a breast mass on CTA coronary in an elderly patient presenting with chest pain, later confirmed as MFB on biopsy. Here we emphasize the imaging appearance, diagnosis, and therapy of breast MFB to aid early diagnosis, as this entity is primarily an incidental discovery in males.

Case Presentation

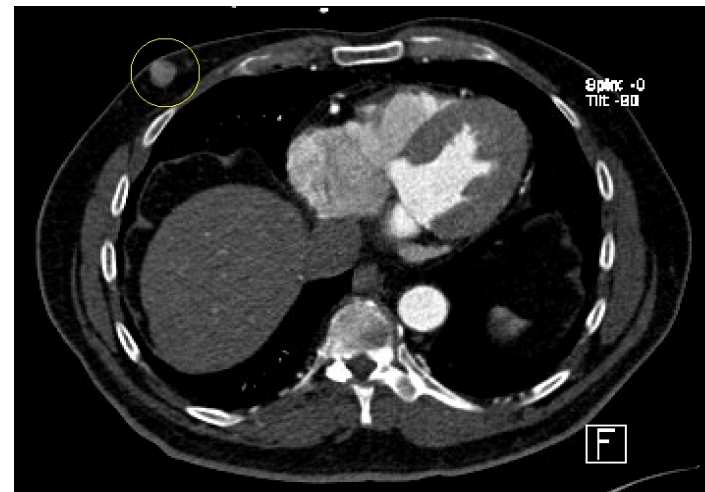
A 75 yr-old male with a past medical history of hypertension, hyperlipidemia, and prior CVA, presented with complaints of exertional chest pain, fatigue and shortness of breath while eating. He had no significant family or social history. On presentation, his blood pressure was 164/97 mmHg, and heart rate was 85 bpm. Physical examination was mostly benign without any skin changes, gynecomastia, nipple changes or retraction, and no supraclavicular or axillary lymphadenopathies. Labs were within normal limits and the EKG showed sinus rhythm. Due to his high risk, a CTA coronary was ordered to evaluate for coronary artery disease. Interestingly, the CTA coronary revealed a right lower breast lump measuring 20x14 mm that was potentially malignant (Figure A). USG-guided biopsies were taken from the right breast mass, confirming the diagnosis of MFB on the pathological exam (Figure B). The patient underwent a successful wide local excision of the right breast mass with margins and the repeat histopathology was consistent with myofibroblastoma.

Discussion:

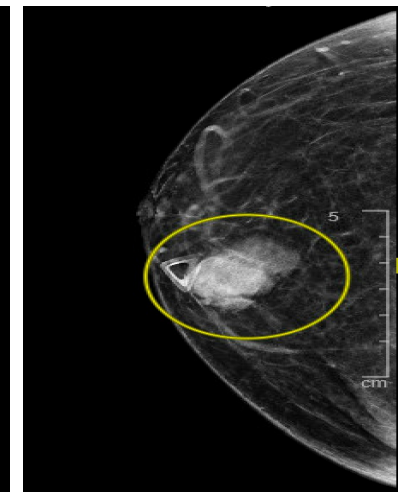
In the last few decades, Cardiac imaging has found itself a spotlight benefiting from massive advancements and increased usage. Improvement in cardiac MRI, CT and advanced echo now allows detailed visualization. These non-invasive diagnostics have become an essential tool in Cardiovascular prevention(3). Additionally, an aging population, screening programs and research lead to increased utilization leading to increased incidentalomas. While it can often lead to early detection, false positives can lead to unnecessary intervention. When the physician ponders "Should I intervene?" they must find a balance between the boon of early diagnosis and the bane of overtreatment.

References:

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3. Daubert, M. A., Tailor, T. D., James, O., Shaw, L. J., Douglas, P. S., & Koweek, L. M. H. (2021). Multimodality cardiac imaging in the 21st century: evolution, advances and future opportunities for innovation. *British Journal of Radiology*, 94(1117), 20200780. <https://doi.org/10.1259/bjr.20200780>.



(A) Axial computed tomography of chest showing soft tissue lesion



(B) Ultrasound of the right breast showing soft tissue lesion.