Clinical picture

Tuberculous myositis mimicking breast cancer

A 63-year-old man, with unremarkable previous medical history, was admitted with a tender mass in the right breast that had been evolving for 3 months. Mammography showed an opaque mass within the right retromammary region; a thoracic CT scan showed a heterogeneous mass in the same area. MRI demonstrated: (i) a heterogeneous lesion involving the right pectoral muscle (10 cm in diameter) enhanced after intravenous gadolinium on T1-weighted images; and (ii) a heterogeneous high-signal intensity involving the pectoral muscle on T2-weighted images.

Surgical exploration revealed a necrotic abscess within the pectoral muscle. Histological analysis of muscle biopsy specimens showed granulomatous nodules composed of epithelioid histiocytes, multinucleated giant cells, and caseous necrosis damage; Ziehl-Neelsen staining yielded acid-fast bacilli in muscle biopsy specimens, and polymerase chain reaction for Mycobacterium tuberculosis complex further proved positive. Cultures grew M. tuberculosis. Other investigations, including gastric aspiration and urine cultures, were negative for M. tuberculosis.

Muscle involvement is a rare complication of tuberculosis, occurring in 0.01–1.8% of patients; it is more often limited to a single muscle (principally the quadriceps femoris). Internists should be aware that tuberculous myositis may mimic breast cancer, resulting in earlier diagnosis and therapy. MRI may be useful in the management of tuberculous myositis, in delineating the anatomical extent of muscle lesions, and guiding the surgeons in debridement.

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