

Primary Tubercular Abscess of Thigh in Infancy

We report two infants who presented with inflammatory thigh swelling in first 6 months of life. BCG scar was seen over left upper arm in both. Mantoux test, chest X-ray and family screening were normal in both infants. Ultrasonography confirmed an intramuscular abscess in one child and subcutaneous abscess in the others. Histopathology showed granulomatous inflammation with caseous necrosis suggestive of tuberculosis (**Fig. 1**). TB culture from the abscess aspirate was positive only in one child. Surgical incision and drainage was performed in both infants, followed by standard anti-tubercular treatment for 6 months with full recovery. Both babies recovered completely after standard treatment and were normal on follow-up till 18-24 months.

Primary tuberculosis of skeletal muscle, first described in 1886, is very rare [1]. Muscles are relatively resistant to tuberculosis due to poor oxygen content and absence of reticuloendothelial cell and lymphatic tissue [1]. Skeletal muscle and subcutaneous tissue is usually affected by direct extension from adjacent tissues. Primary involvement is commonly seen with an underlying disorder, immunocompromised condition, local injury or by direct inoculation [2]. BCG scar was present on left arm in both infants ruling out erroneous BCG vaccination in the thigh [3].

They were given vitamin K and Hepatitis B vaccine in thigh. It may be postulated that the intramuscular injection damages the local tissue in some unknown way so that organisms, apparently dormant elsewhere, lodge in these area of diminished resistance [4]. However, the time required for soft tissue tuberculosis to evolve after primary complex formation in lungs is usually in years, and presentation in early infancy makes the pathogenesis unclear.

Hematogenous tuberculosis of muscle and subcutaneous tissue is insidious in onset presenting as

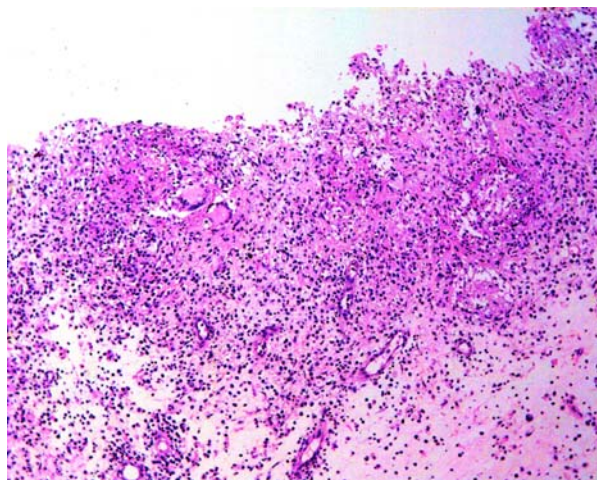


FIG. 1 Abscess wall showing caseous necrosis with epithelioid granulomas and giant cells. (See color image at website)

swelling with or without pain often causing delay in diagnosis. Caseous necrosis with giant cell on histopathology and/or positive tuberculous culture is diagnostic [1]. Differential diagnosis includes pyogenic abscess or injection swelling.

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