**Disseminated BCG and Lupus Vulgaris**

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A three-year-old boy was found to have a non-tender, bony swelling at the base of his right thumb after presenting to Accident and Emergency with an unrelated injury. On further questioning the parents revealed the swelling had been present for approximately six months and was increasing in size. A hand x-ray showed an enlarged right first metacarpal containing lytic and sclerotic areas suggestive of chronic osteomyelitis. See Figure 1A. A raised red/purple plaque was also noted on the lateral aspect of the child’s left upper arm in keeping with lupus vulgaris (LV). See Figure 1B. This had appeared after neonatal Bacillus Calmette-Guerin (BCG) vaccination and was gradually increasing in size. He was clinically well with an otherwise normal examination and was thriving.

Tuberculosis or disseminated BCG infection was suspected and he underwent biopsies of the relevant sites. *Mycobacterium bovis* was cultured from both skin and bone biopsies with polymerase chain reaction confirming BCG strain with pyrazinamide resistance. The child was prescribed 12 months of rifampicin and isoniazid with ethambutol added for the first four months. After six months of treatment the LV had subsided to leave scarring (Figure 2A) and the swelling and x-ray changes had resolved. See Figure 2B. Initial screening for an immunodeficiency was negative but he remains under investigation.

Disseminated BCG is diagnosed by confirming BCG infection in one or more anatomical sites distant from the injection site. Sites include bone, liver and spleen. It is a rare complication of BCG vaccination and is usually associated with immunodeficiency and a high mortality. LV is a form of cutaneous tuberculosis and a rare, local complication of BCG vaccination.

**1B**