



**Figure.** Tense bullae and papulonodules on the palm and ventral digits and erythematous excoriations on the wrist.

Scabies is a common skin infestation caused by the mite *Sarcoptes scabiei* var. *hominis* that more frequently affects the pediatric population.<sup>1</sup> The mite is transmitted from one person to another through direct contact. Diagnosis is confirmed by identification of mites, eggs, or fecal material of mites under microscopy. Bullous scabies, a less common presentation of scabies, has been reported in children.<sup>2-4</sup> One study found that 6% of children age <15 years with scabies presented with blisters.<sup>4</sup> Classically, scabies presents with discrete erythematous papules and nodules, excoriations, and burrows, with predilection for interdigital spaces, umbilicus, wrists, hands, axillae, and genitalia. Dermoscopy may reveal a “delta sign,” which appears as a triangle corresponding to the head of the mite.<sup>5</sup> Bullous scabies can include all of these typical findings in addition to tense bullae, filled with clear or hemorrhagic fluid. The mechanism of bullae formation remains unknown but is thought to be direct injury by mites or immune response.<sup>3</sup>

The differential diagnoses for bullous scabies in children may include arthropod bite reaction, bullous impetigo, a scalding burn or chemical irritant, dyshidrotic eczema, contact dermatitis, and epidermolysis bullosa acquisita. Although much less likely, the hemorrhagic bullae on this child’s hand could prompt consideration of vibrio vulnificus infection in the appropriate clinical setting (acute onset, ill-appearing, exposure to raw seafood). The child did not have a history of arthropod bite or exposure, or a history of trauma or irritant exposure. Improvement with topical steroids would be expected for a diagnosis of dyshidrotic eczema or contact dermatitis. However, the most pertinent clue to the diagnosis on physical examination in this case was the erythematous excoriated papules on her flexure wrists.

Treatment of bullous scabies is the same as that of classic scabies and usually consists of topical permethrin, sulfur, or oral ivermectin. Close contacts should be treated, even if not symptomatic, and clothing and bedding should be thoroughly washed in hot water. ■

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## Axillary Calcification Due to Bacillus Calmette–Guérin Vaccination



**A** 10-month-old, fully vaccinated, infant boy was admitted to our hospital in rural Laos with respiratory distress that ultimately was diagnosed as due to beriberi.<sup>1</sup> At the time of admission, a firm mass was noted in the right axilla (**Figure 1**) during routine physical examination. His parents reported that the mass was first palpable at about 4 months of age, had progressively increased in size until about a month before admission, and had since stabilized. A chest radiograph demonstrated a calcified right axillary mass with the typical appearance of

lymph nodes (**Figure 2**, arrow). A re-review of a chest radiograph obtained during a previous hospital visit at 2 months of age confirmed that this calcification was not visible at that time (**Figure 3**).

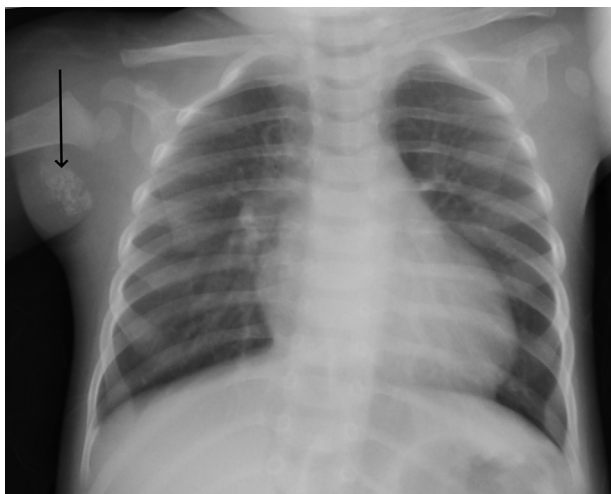
Axillary lymph node calcification is an occasional consequence of the intradermal *Bacillus Calmette–Guérin* vaccination of infants shortly after birth and occurs due to replication of the attenuated *Mycobacterium bovis* bacilli and clearance by regional lymph nodes. The calcification may expand over the first year of life and may subsequently regress or may remain stable in size without clinical consequence. No specific treatment or resection is necessary unless the calcified nodes become painful or otherwise cause distress. This has been



**Figure 1.** An approximately 1.5-cm firm mass palpable in the right axilla.

noted as early as 1950 following widespread Bacillus Calmette–Guérin vaccination in tuberculosis-endemic settings.<sup>2</sup>

The differential diagnosis of axillary lymph node calcification in young children includes other granulomatous diseases such as tuberculosis, histoplasmosis, and sarcoidosis.<sup>3</sup>



**Figure 2.** Anteroposterior chest radiograph at 10 months of age demonstrating calcified right axillary lymph nodes (*arrow*).



**Figure 3.** Anteroposterior chest radiograph at 2 months of age without visible axillary calcification.

Malignant and iatrogenic etiologies should be considered in older children and adults.

Our patient improved quickly with thiamine supplementation and was able to be weaned off supplemental oxygen and discharged within 3 days without complications ■

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