

# Inguinal mass in a 4-month-old boy

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**A** previously well 4-month-old boy, with no history suggestive of immunodeficiency, presented to the clinic with a 1-month history of a right-sided inguinal mass (Figure 1). He was a twin pregnancy born at 37 weeks' gestational age to a healthy mother of Canadian origin who was living in Vietnam at the time.

At 3 months of age, on a visit to Toronto, the patient developed a right inguinal swelling (1.6 × 1.4 cm) but was systemically well. The mass did not respond to courses of cephalexin and clindamycin and began to drain purulent discharge. At birth, the patient had received the bacille Calmette-Guérin (BCG) vaccine in his right gluteal area (per mother's request) and a scar was present (Figure 2).

An ultrasound showed a necrotic lymph node. Our differential diagnosis included an inguinal hernia, bacterial adenitis, mycobacterial adenitis (owing to *Mycobacterium tuberculosis* or a nontuberculous mycobacterial species) or a BCG abscess. An excisional biopsy of the lesion was positive for acid-fast bacilli on smear and positive for *Mycobacterium tuberculosis* complex by polymerase chain reaction and grew *Mycobacterium bovis* BCG on culture. He received no other therapy and his wound healed well postoperatively.

The BCG vaccine is administered at birth throughout Central and South America, Africa, Asia and Eastern Europe. Common complications of BCG immunization include local reactions and regional lymphadenitis, occurring in as many as 5% of vaccinated children, typically 2–3 months after immunization.<sup>1</sup> The most common site of BCG administration is the deltoid region, and most BCG-related lymphadenitis (often suppurative) involves the axillary or supraclavicular nodes. There are few reports of inguinal lymphadenopathy, with 1 report related to immunization in the thigh.<sup>2</sup>

There are few data about optimal management of BCG lymphadenitis. In general, expectant management without therapy is advised.<sup>3</sup> In our case, surgery was performed for definitive diagnosis and treatment.

## References

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**Figure 1:** Right suppurative inguinal mass (measuring 1.6 × 1.4 cm) presenting in a previously well 4-month-old boy born in Vietnam.



**Figure 2:** Right gluteal scar secondary to bacille Calmette-Guérin (BCG) vaccination given at birth in Vietnam.

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The authors have obtained consent from the patient's family.

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