Images in Clinical Tropical Medicine

An Unusual Cause of Thigh Swelling: Tuberculosis of the Pubis

Pankaj Kumar Garg,* Ashish Chaurasia, and Abhishek Pratap Singh

Department of Surgery, University College of Medical Sciences and Guru Teg Bahadur Hospital, University of Delhi, Delhi, India

A 17-year-old girl presented with a progressively enlarging painless lump of 5 months duration in the medial aspect of the superior and anterior right thigh. Physical examination showed a 12 × 8-cm cystic swelling in the adductor region of the right thigh deep to the adductor muscles (Figure 1). Pelvic X-ray showed a well-defined round lytic lesion in the body of the right pubic bone with surrounding sclerosis (Figure 2). Magnetic resonance imaging of the pelvis and thigh revealed a well-marginated predominantly cystic lesion (hyperintense on T1-weighted [T1W] and markedly hyperintense on T2-weighted [T2W]/Short TI Inversion Recovery [STIR] images) in the medial aspect of the right upper thigh involving the adductor longus muscle with splaying of the adductor magnus and gracilis muscle with lateral splaying of the femoral vessels with maintained fat planes (Figure 3). Chest X-ray was unremarkable. Cytology from fine-needle aspiration of the swelling showed epithelioid cells, a few multinucleated giant cells, and granular eosinophilic material (caseation). Ziehl–Neelsen staining for acid-fast bacilli was positive. Radiometric liquid culture system BACTEC (Becton Dickinson Diagnostic Instruments, Sparks, MD) identified the presence of *Mycobacterium tuberculosis* from the purulent discharge. Serological tests for human immunodeficiency virus (HIV) I and II were negative. The patient was diagnosed with tuberculosis of the pubis with cold abscess in the right thigh. The patient was prescribed four-drug antituberculosis treatment, including

rifampicin, isoniazid, pyrazinamide, and ethambutol, for 2 months followed by rifampicin and isoniazid alone for 4 additional months. At the end of the 6 months of treatment, pelvic X-ray showed sclerosis of the previous lytic lesion in the pubic bone (Figure 2). After 9 months of follow-up, the patient remained without recurrence.

Tuberculosis commonly affects the pulmonary system, and extrapulmonary involvement is seen in approximately 14% of patients, with 1–8% having osseous involvement. The major osseous areas of tubercular involvement in order of occurrence are spine, hip, knee, foot, elbow, and hand.¹ Isolated pubic bone tuberculosis is an uncommon entity, even in tuberculosis-endemic areas.² The associated cold abscess in this patient might have resulted from the fluid tracking down the thigh inside the sheaths of the adductor brevis and longus muscles, because the origin of these muscles on the pubic bone coincides with the tubercular lytic lesion. Although rare, tuberculosis of the pubis should be considered in the differential diagnosis of cold abscess of the thigh.

FIGURE 1. Clinical photograph of the patient reveals a swelling in the superior and anterior aspect of the right thigh.

FIGURE 2. (A) shows a well-circumscribed lytic lesion in the body of the right pubic bone before initiation of antituberculosis treatment. (B) Pelvic X-ray after 6 months of antituberculosis treatment.

*Address correspondence to Pankaj Kumar Garg, Department of Surgery, University College of Medical Sciences and Guru Teg Bahadur Hospital, University of Delhi, Dilshad Garden, Delhi 110 095, India. E-mail: dr.pankajgarg@gmail.com

FIGURE 3. (A) T1W and (B) T2W magnetic resonance imaging of the pelvis reveals a well-marginated predominantly cystic lesion in the adductor compartment of the right thigh.

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Authors' addresses: Pankaj Kumar Garg, Ashish Chaurasia, and Abhishek Pratap Singh, University College of Medical Sciences and Guru Teg Bahadur Hospital, University of Delhi—Surgery, Delhi, India, E-mails: dr.pankajgarg@gmail.com, small.ashish@gmail.com, and abhi14289@gmail.com.

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