

Infantile Psoas Abscess

Dear Editor,

Psoas abscess, a complication of skeletal tuberculosis, is not a well-known phenomenon in infants. In India, 5% of skeletal tuberculosis cases develop psoas abscess and this is a reflection of infection and poor socio-economic conditions. We report a case of left psoas abscess in an infant with reactive effusion due to tuberculosis that was treated with anti-tuberculous treatment.

Introduction

In India, 5% of patients with skeletal tuberculosis develop a psoas abscess as a complication.¹ About 70% of psoas abscess cases have been reported in the age group of 10 to 17 years, but patients of more than 40 years of age usually develop psoas abscess due to secondary origin with a slight male preponderance.² In infants, psoas abscess is rarely reported.³ We report a 6-month-old child with tuberculous psoas abscess who was treated with anti-tuberculous therapy.

Case Report

A 6-month-old girl presented with intermittent fever since 4 months old and swelling around the left hip joint 20 days prior. There was no contact with tuberculosis (TB). Her ultrasound showed left psoas abscess with reactive effusion in the left hip, knee and ankle joint with subcutaneous edema. The abscess was drained surgically. Histopathology was suggestive of tuberculous abscess with caseating granulomas though acid fast bacilli (AFB) was not seen on smear. TB culture was not done. Her chest X-ray was normal. Mantoux test was positive 10 mm. She was started on 4 drugs anti-tuberculous therapy consisting of isoniazid (H), rifampicin (R), ethambutol (E) and pyrazinamide (Z), which she received for a period of 2 months. Isoniazid and rifampicin were given as maintenance therapy for the next 7 months. Around 6 months of treatment, the pelvis x-ray showed no epiphysis of left femur. She was advised to go for regular follow-up for her stature monitoring and was currently asymptomatic.

Discussion

Psoas abscess which has an insidious onset and variable symptoms often causes a delay in the diagnosis in

children. Psoas abscess is one of the rare complications of musculoskeletal tuberculosis which has to be differentiated from other complications like Pott's disease and osteoarthritis.⁴ Collection of pus in the Ilio-psoas compartment is known as psoas abscess, which may be of primary or secondary origin.⁵ *Staphylococcus aureus* is the most common organism causing primary psoas abscess, due to lymphatic or haematogenous spread from an occult origin, while the secondary type is due to a local extension of infection.^{2,6} The tuberculous infection spreads along the psoas muscle sheath to the hip bone through the intralesional vascular flow, which is responsible for its dissemination.⁷ In our patient, psoas abscess led to the extension of inflammation to the hip joint.

Clinical features of psoas abscess include a triad of symptoms comprising flank or back pain, limitation of hip movement, and fever which can be a hindrance to diagnosis as it is a similar presentation seen in septic arthritis of the hip and osteomyelitis.⁸ Our patient who was also presented with intermittent fever and hip swelling developed reactive effusion in the left hip, knee and ankle joint with subcutaneous edema, which was due to an inflammatory response of the body to the chronic infection.⁹ Image-guided percutaneous drainage has become the gold standard for treatment of psoas abscess, which has subsequently reduced the mortality in children up to 2.4%.¹⁰

We conclude that psoas abscess is a very rare manifestation in infants and requires a strong clinical suspicion due to the insidious onset of symptoms.

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