Tuberculous Gluteal Abscess in Infancy

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ABSTRACT

Primary tuberculous gluteal abscess without bone involvement has not been reported in infancy. We report 3 infants with isolated tuberculous gluteal abscess who presented with gluteal swelling of 2 weeks, 1 month and 6 months duration, respectively. Tuberculin test was positive in all cases. Pus cultures from the gluteal abscess grew Mycobacterium tuberculosis in all 3 infants.

Key words: *Gluteal abscess, Infant, Tuberculosis.*

Despite high prevalence of tuberculosis worldwide, isolated tuberculous gluteal abscess is rare and reported only in adults(1,2). We report 3 cases of tuberculous gluteal abscess in infancy.

CASE REPORTS

Case 1: A 8-month old girl presented with a progressive swelling in the left gluteal region for 2 weeks with intermittent fever. She was previously treated with antibiotics and aspiration was also attempted. There was no known contact with tuberculosis patients. BCG scar was seen on the left deltoid region. The infant weighed 7.3 Kg (>50th percentile, NCHS). There was no generalized lymphadenopathy. The swelling was soft, diffuse, tender and non-erythematous measuring 2×2 cm in the left gluteal region with a smooth surface without sinuses. Movements around the left hip joint were normal. Systemic examination was normal. A probable diagnosis of antibioma or chronic abscess was considered. Blood investigations showed normal counts. Chest roentgenogram and sonogram of the abdomen, pelvis and hips were normal. Mantoux test with 1 TU was positive measuring 15 mm. The abscess was incised and the pus sent for histopathological examination showed features of granulomatous inflammation with caseation. Smear for acid-fast bacilli (AFB) was positive. The pus culture grew *Mycobacterium tuberculosis*.

Case 2: A 10-month old male infant admitted for diarrhea was incidentally found to have a swelling in the left gluteal region. The swelling was present for 6 months, for which aspiration was done a month before. The infant weighed 8.4 kg (>50th percentile, NCHS) and had no signs of systemic disease. The swelling was diffuse, non-tender, non-erythematous measuring 2×2 cm in the left gluteal region with a smooth surface without sinuses. Chest *X*-ray and sonogram of the abdomen, pelvis and hips were normal. Mantoux test with 1 TU was positive measuring 20 mm. The abscess was incised and the pus drained showed features of granulomatous inflammation with caseation. Smear and culture for AFB was positive and grew *Mycobacterium tuberculosis*.

Case 3: A 10-month old girl infant presented with progressive swelling in the left gluteal region over 1 month. An indurated sinus, discharging purulent material with an underlying swelling of 2×2 cm, fixed to the skin was present on examination. Routine blood investigations, chest radiograph and sonogram of the abdomen, pelvis and hips did not reveal any abnormalities. Mantoux test with 1 TU was strongly positive measuring 15 mm. The pus smear and culture were positive for *Mycobacterium tuberculosis*.

All these 3 infants were treated with anti-tubercular therapy - isoniazid, rifampicin, pyrazinamide and ethambutol (2HRZE/7HR) on a 9 month regime and were clinically normal after a 1 year follow up.

DISCUSSION

We report 3 infants, where antibioma was considered as an initial diagnosis in 2 out of the 3 cases. On

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further evaluation of the non-healing abscesses despite incision and drainage performed earlier, the diagnosis was finally revised as cold abscess. The similar clinical presentation helped us to clinch the diagnosis in the third infant. All our 3 cases had isolated gluteal abscess. Clinically there was no involvement of the bursa around the ischial tuberosity and the greater trochanter, which were reported to be the commonly involved sites. The lungs, spine, pelvis and proximal femur were clinically and radiologically normal. All the infants had received BCG vaccination in the newborn period. The parents and other family members of all the three children were screened and reported negative for tuberculosis. HIV screening by ELISA was negative in all the infants.

The primary source of infection is unclear in all the three cases. It is difficult to assume that the infection in the buttock could have been transmitted from contaminated syringe and needle, considering the fact that only disposable syringes are used in the present days(3). The organism grown from the culture was *Mycobacterium tuberculosis*, and not *Mycobacterium fortuitum* and *M. chelonei*, which are commonly expected in injection abscess(4,5). The diagnosis in our case was based on positive Mantoux test, histological features of caseating granulomatous inflammation, culture, and favorable response to anti-tubercular therapy. In the third case, there was a history of measles vaccination a week prior to the onset of complaint. It is possible that subsequent post-vaccination decrease in immunity might have possibly flared up an underlying tuberculous infection.

We should consider the possibility of tuberculosis in any child who presents with chronic abscess, which does not heal with antibiotics.

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