e-ISSN: 0975-1556, p-ISSN:2820-2643
Available online on www.ijpcr.com
International Journal of Pharmaceutical and Clinical Research 2024; 16(3); 564-567

Case Report

Case Report: Childhood Tuberculosis Presenting as an Anterior Chest Wall Abscess

J Pranab[1], Ansar Hussain[2], Smruthi Theja[3]

[1]MBBS MD Paediatrics, Vijay Marie Hospital and Educational Society.
[2]MD Paediatrics, Vijay Marie Hospital and Educational Society.
[3]DNB Resident, Vijay Marie Hospital and Educational Society.

Received: 19-01-2024 / Revised: 26-02-2024 / Accepted: 16-03-2024
Corresponding Author: Dr. Smruthi Theja
Conflict of interest: Nil

Abstract:

Anterior chest wall abscess is a rare manifestation of childhood tuberculosis. A case report of tuberculous chest wall abscess in a 1.6 years old healthy girl who had received Bacillus Calmette-Guerin (BCG) vaccination at birth. She developed a localized anterior chest wall mass, which was initially diagnosed as soft tissue neoplasm on the USG and MRI. Pathologic examination of the FNAC specimen revealed chronic granulomatous inflammation and positive acid-fast staining, which confirmed the diagnosis of chest wall tuberculosis infection. Received a 6-month course of anti-tuberculous treatment. The chest wall lesion was resolved without the need for surgery. In conclusion, tuberculosis should be ruled outin children with undiagnosed chest wall lesions, especially in endemic areas, even if they have been vaccinated with BCG. Adequate anti-tuberculosis treatment can result in a complete recovery.

Keywords: Chest Wall Abscess, Tuberculosis, Chronic Granulomatous Lesion.

Introduction

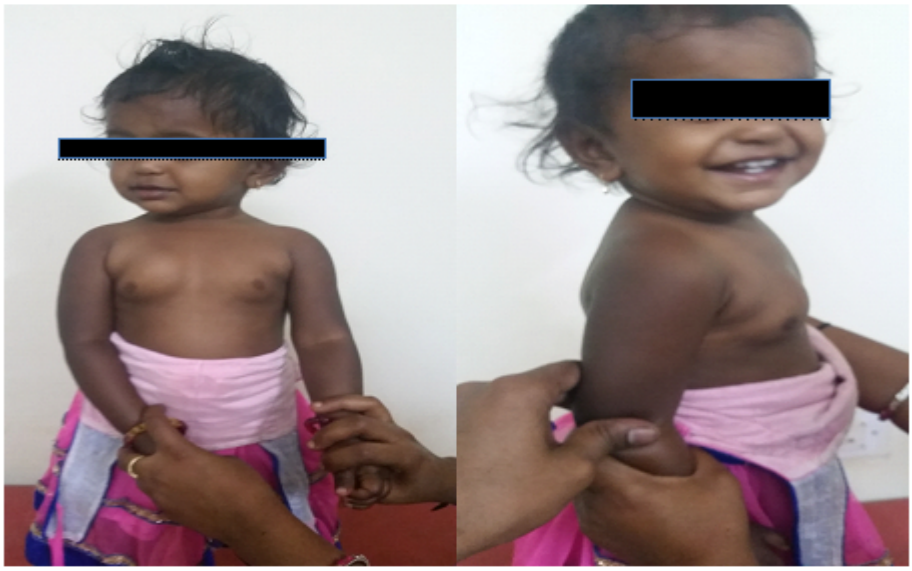

Figure 1

Case Report:

A 1.6 years old healthy girl presented to OPD with h/o swelling in the right anterior chest wall since1 month which was spontaneous onset and progressive in nature. Associated with mild intermittent cough with no aggravating and relieving factors.

no h/o pain, no h/o trauma, no h/o fever, no h/o evening rise of temperature, no h/o documented weight loss, no h/o contact with tuberculosis, no h/o hurried breathing.

The child was immunized to date and BCG scar was present.

On examination childs vitals were stable .On local examination swelling was found to be non-tender, non-erythematous and no local rise of temperature. Axillary lymphnodes were enlarged on the same side but of non-significant size. No other lymphadenopathy.

Systemic examination: Respiratory system: NVBS+ no crepitation's, no rhonchi.

Other systems with in normal limits.

- Anthropometry:

	Expected		
Height	74cms	80.7	-2sd &-3sd
weight	9kgs	10.2	-1sd &-2sd
H.C	43.7cms	46.2	-1sd&-2sd
MAC	14.7cms	Normal	

HC: head circumference; MAC: Mid upper arm circumference

With the diagnosis of an anterior chest wall abscess child was started on antibiotics.

- Blood investigations were within normal limits.
- Chest x ray: normal

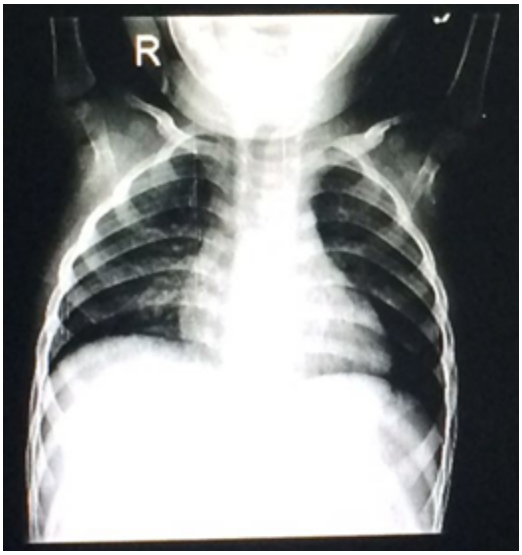

Figure 2

USG chest :

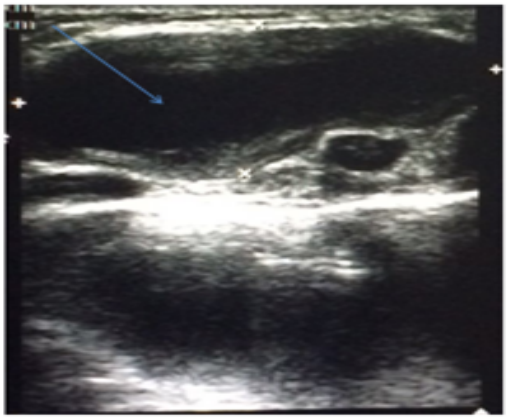

Figure 3

- MRI chest -done outside was s/o well defined cystic lesion in the anterior chest wall in

relation to the 2nd to 4th costal cartilages with morphological features possibly s/o ?abscess ?? Soft tissue neoplasm .

- FNAC wasdone and was sent for investigation sent was suggestive of highly cellular and show dense sheets of neutrophils with occasional epithelioid granulomas, background shows necrotic debris with caseous necrosis and hemorrhage.
- ZN stain was positive for AFB, CBNAAT positive
- S/O: Tuberculosis cold abscess.

Low power field: Caseous necrosis

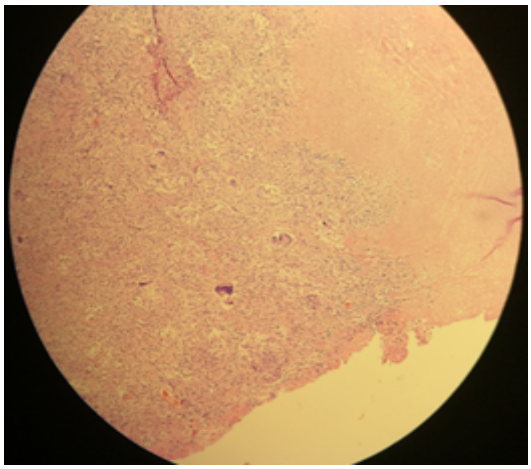

Figure:4 : magnification 40X,H & E stain

High power field- Gaint cells of Langerhans

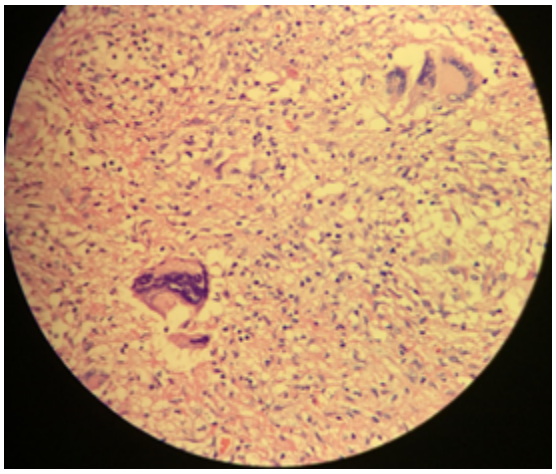

Figure 5 : magnification 100 X , H & E stain

- Mantoux test was strongly positive (20 mm).
- The culture and sensitivity of the fluid aspirated was s/o mycobacterium tuberculosis.
- The child was started on Anti-tubercular drugs; category:1.

Follow up: There was a complete reduction in the swelling and the child was active with no complaints.

Discussion

Musculoskeletal tuberculosis occurs in 1-3 % of the patients with tuberculosis [1,2], While tuberculosis of the chest wall constitutes 1-5% of all cases of musculoskeletal tuberculosis [3]. This form of TB may result from direct inoculation or hematogenous dissemination from a primary focus such as lung [4].

In our case the child was brought with painless swelling in the right anterior chest wall Initial diagnosis of soft tissue neoplasm was thought and MRI done was suggestive of same but FNAC done was s/o tuberculosis.

Diagnosis of musculoskeletal TB remains a challenge for clinicians and requires a high degree of suspicion The combination of indolent onset of symptoms positive tuberculin skin test and compatible histopathological findings with a positive culture strongly suggest the diagnosis.

Prompt diagnosis and treatment are important to prevent serious complications.

What is Unusual in Our Case

- Rare form of tuberculosis.
- Unusual site of presentation.
- Healthy child with no other complaints.
- BCG vaccinated child.
- Complete recovery with ATT without the need for surgery.

References

1. Yao DC, Sartoris DJ: Musculoskeletal tuberculosis. Radiol Clin North Am. 1995; 33: 679-89.
2. Goldberg I, Avidor I: Isolated tuberculous tenosynovitis of the Achilles tendon: a case report. Clin Orthop. 1985; 194: 185-8.
3. Morris BS, Maheshwari M, Chalwa A: Chest wall tuberculosis: A review of CT appearances. Br J Radiol. 2004; 77: 449-57.
4. Learch TJ, Hsiao NM: Tuberculous infection of the gracilis muscle and tendon clinically mimicking deep venous thrombosis: sonographic findings. Skeletal Radiol. 1999; 28: 457-9.