

# Rare Site of Scrofuloderma in a 6yrs Male Child

Sunil Ku. Agarwalla<sup>1</sup>, Rina Meher<sup>2</sup>

<sup>1</sup>Associate Professor, Department of Paediatrics, M. K. C. G. Medical College, Berhampur, Odisha, India

<sup>2</sup>Senior Resident, Department of Paediatrics, M. K. C. G. Medical College, Berhampur, Odisha, India

**Abstract:** *Cutaneous tuberculosis is the rarest presentation of all the forms of tuberculosis. Scrofuloderma is a frequent manifestation of cutaneous tuberculosis in Indian scenario. Males are affected one and half times more than females. The most common affected age group showing clinical infection is within the first three decades of life. A 6yrs male child came to our dept of paediatrics with complains of fever and multiple swelling over the body for 6month and diagnosed to be a case of Scrofuloderma by montoux test, fine needle aspiration cytology , chest X-ray and histopathology. The mainstay of treatment remains medical therapy but the underlying cause for severe immunosuppression needs to be ruled out and treated. (Indian J Tuberc 2011; 58: 189-195). Our patient was not a case of Primary Immunodeficiency or HIV and responded nicely with Anti Tubercular Therapy.*

**Keywords:** Cutaneous Tuberculosis, Scrofuloderma

## 1. Case Study

A 6yrs male child came to our OPD with chief complain of multiple abscess over body for 6m and on & off fever for 5m without any history of cough and cold, hurried respiration, dysuria, hematuria, ear discharge or headache, blood transfusion, contact with TB. There was no similar history in the past with fully immunized as per age with BCG scar present. On examination there was some pallor with cervical lymphadenopathy present without cyanosis or clubbing or edema with stable vitals with bilateral normal chest with other system being normal. There was multiple healed abscess over the body with some discharge in the face. There was a soft, fluctuant swelling of 9.5\*7 cm at right paraspinal region above the waist. There was another ulcer on the xiphisternal region with bleeding and minimal pus discharge. His weight was 13.8 kg & height was 103cm. That patient was admitted with Inj. Ampiclox & ceftriaxone and muperoicin ointment for local application with a diagnosis of Primary immunodeficiency with multiple pyaemic abscess. Investigation reveals Hb 9.6gm/dl, TLC 9,600/uL, TPC 5.2 lakh, microscopic hypochromic anemia, ESR 105mm, ICTC nonreactive, Montoux test 24mm(+ve), sickling test negative, MP(ICT) neg, RFT, LFT, Electrolytes normal. Cold Abscess was drained which revealed AFB bacilli as well as CBNAAT positivity. FNAC of cervical lymph node reveals Granulomatous adenitis (Tubercular). Blood culture report shows normal Growth. Chest X-ray having bilateral opacity at hilar region. Primary Immunodeficiency (PID) Panel done, but it came out to be normal.

Keeping in view of montoux +ve, FNAC of LN suggestive of TB Adenitis, Cold Abscess revealed AFB & CBNAAT +ve, Long duration of disease, multiple skin lesion final Diagnosis of TB Lymphadenitis & Scrofuloderma was made and ATT started as per 2019 RNTCP Guideline. On follow up after 2m, all the skin lesions almost healed up and child was clinically better. Again the patient advised to follow up at the end of the therapy.



Figure 1: Chest Xray of that patient



Figure 2: Ulcers over the face



**Figure 3:** Cold Abscess over the back



**Figure 4:** Ulcer over chest

## 2. Discussion

Tuberculosis is a chronic infectious disease caused by *Mycobacterium tuberculosis*, known to cause morbidity and mortality among millions of people each year. The World Health Organization estimates that nearly one third of global population is at the risk of developing the disease (1).

Scrofuloderma is a type of secondary tuberculosis (TB) from endogenous source; it occurs by contiguous spread from tuberculous lymph nodes, bones, or joints. Cutaneous tuberculosis, caused by *M. tuberculosis* and *M. bovis*, constitutes 1.5% of all cases of extrapulmonary tuberculosis (2). Scrofuloderma is due to reactivation of dormant tuberculosis. Tuberculin skin test is usually positive. But it has a very low specificity. A cold abscess is formed and the underlying skin is eroded. The lesion begins as subcutaneous nodules, which become doughy in consistency. With progressive liquefaction, a cold abscess is formed and the skin erodes to form a discharging sinus. There may be healing with scarring and recurrence of disease over several years.

Typical ulcers have undermined edges and a floor of granulation tissue. Lesions show presence of acid fast bacilli (AFB) from stained cytology smears or biopsy sample as well as positive cultures for mycobacteria (3).

Lupus vulgaris and Scrofuloderma are the two most common forms of cutaneous tuberculosis. Lupus is a chronic and progressive form of cutaneous tuberculosis that affects the head and neck area, lower extremities and gluteal region. Typically, the lesion is a solitary, well-demarcated, erythematous, indurated, and slowly enlarging plaque. Lupus vulgaris is most common form in adults, while Scrofuloderma in children.

Cutaneous tuberculosis can be confused with cutaneous leishmaniasis, leprosy, atypical mycobacterial infections, sporotrichosis and sarcoidosis.

Anti tubercular therapy is the mainstay of treatment for scrofuloderma.

## 3. Conclusion

As in our country malnutrition and immunodeficiency leads to Tuberculosis in most of the cases, all cases needs to be diagnosed early and Antitubercular Therapy has to give in addition to taking care of the nutrition, thereby improving the immunological status. Though Scrofuloderma is common in neck area but in our case uncommon sites like face & chest are involved. Such rare sites of Scrofuloderma stimulated us to report this case.

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