

## Axillary Cold Abscess Feigning as Lipoma: A Case Report and Review of Literature

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**Abstract:** Isolated axillary tuberculous lymphadenopathy is rare and described in patients without evidence of previous or ongoing tuberculosis anywhere in the body. Presented is a 12 year old female with one year history of axillary swelling, clinical examination and investigations revealed no evidence of tuberculosis elsewhere. Diagnosis was established by histology. Tuberculosis should be considered in patients residing in endemic areas with axillary lymphadenopathy.

**Keywords:** Axillary lymphadenopathy, Cold abscess, Tuberculosis

### INTRODUCTION

Tuberculosis (TB) is a cause of a large volume disease and involves about one third of the world population with maximum number of patients belong to developing countries [1]. Extra pulmonary TB constitutes 7-30% of TB cases and lymphadenitis cases are 17-43% of total TB cases. Cervical lymph nodes are the most commonly involved site and axillary lymph nodes are affected in 3.8-20.3% cases [1, 2]. But tubercular axillary lymph nodes occurring in patients who were not suffering from active tubercular disease elsewhere are rarely reported [3, 4]. Tubercular lymphadenitis of a single group may be unilateral in 85% of the cases. It usually presents as slowly increasing swelling which is painless [5]. Sometimes it poses challenge in diagnosis and therapy when it mimicks or coexists with carcinoma breast [1, 6]. Diagnosis is confirmed by histopathological examination. The reported case is a healthy 12 years female with primary axillary tuberculosis. There was no history of TB in the past and no active tubercular focus was found in the body. She was seronegative for HIV.

### CASE REPORT

It is a case report of a 12 year old female who presented in the outpatient clinic with a history of swelling in the right axilla of one year duration. The swelling gradually increased in size and was painless. There was a history of occasional low grade fever but no cough, anorexia or drenching night sweats; no breast

changes or right upper limb lesions. Examination revealed a female in good health, one discrete right axillary swelling (Fig. 1, 2) that measured 10×5 cm in diameter, non tender, soft to firm, smooth surfaced and mobile; the contra- lateral axilla was unremarkable, breasts, upper limbs and other regions were essentially normal. A provisional diagnosis of lipoma in right axilla was made.

Investigations carried out included complete blood count, hemoglobin 12 g/dl, White blood cell,  $5.8 \times 10^3$  ul: Lymphocytes 38.1%, monocytes 9.9%, granulocytes 52%. Chest X-ray showed clear lung fields; human immunodeficiency virus I & II screening negative; USG showed hypoechoic lesion in the right axilla indicating cold abscess (Fig. 3); fine needle aspiration and cytology of the axillary swelling revealed granulomas with caseation consistent with tuberculosis.

Clinical diagnosis made was right axillary cold abscess with lymphadenitis. She was given anti-tuberculosis chemotherapy with satisfactory therapeutic response. Four months post chemotherapy the left axilla was normal.



**Fig. 1: Anteroposterior view of axillary swelling**



**Fig. 2: Oblique view of axillary swelling**



**Fig. 2: USG of axilla showing hypoechoic area (cold abscess)**

#### DISCUSSION

With increasing incidence of HIV infection, the extra-pulmonary TB including tubercular lymphadenitis are increasing. But more incidence of tubercular lymphadenopathy in seronegative patients may reflect poor control measures on disease control [2].

Tuberculosis of axillary lymph nodes is rare it poses difficulty in differential diagnosis with carcinoma of breast especially in older patients [7, 8]. But our case was 12 year old female and she had no history of constitutional symptoms of TB and on examination bilateral breasts were normal. First thought was of lipoma.

The breast is usually involved by secondarily spread of tuberculosis though the lymphatics from axilla but rarely breast may be affected primarily by TB [4]. It may be possible that our patient presented before the involvement of the breast. The development of carcinoma breast with TB is not usual. Tubercular lymphadenitis cases have been reported without pulmonary or breast TB [9].

If there is diagnostic dilemma, calcification found on radiography, one should be wary to rule out TB even in absence of history of exposure to TB [10]. The X-ray is of value for diagnosis of tubercular lymphadenitis when clustered calcification is seen in axillary lymphadenitis [11]. In our case, X-ray did not show calcification probably she presented before the development of calcification but diagnosis was confirmed on histopathology as reported in literature [4].

#### CONCLUSION

Primary tubercular lymphadenitis is still a rare condition but should be kept in mind when dealing with any case of axillary lump at any age.

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