

## Isolated Axillary Tuberculous Lymphadenopathy: A Rare Entity

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### Abstract

Isolated axillary tuberculous lymphadenopathy is described as patients having axillary lymphadenopathy without evidence of previous or ongoing tuberculosis anywhere in the body<sup>[1,2]</sup>. A 30-year-old female presented with history of axillary swelling, clinical examination and investigations revealed no evidence of tuberculosis elsewhere. Diagnosis was confirmed by histopathology. In patients residing in endemic areas, those presenting with axillary lymphadenopathy, tubercular etiology must be considered.

**Keywords:** Isolated Axillary lymphadenopathy, Tuberculosis, Histopathology

### Introduction

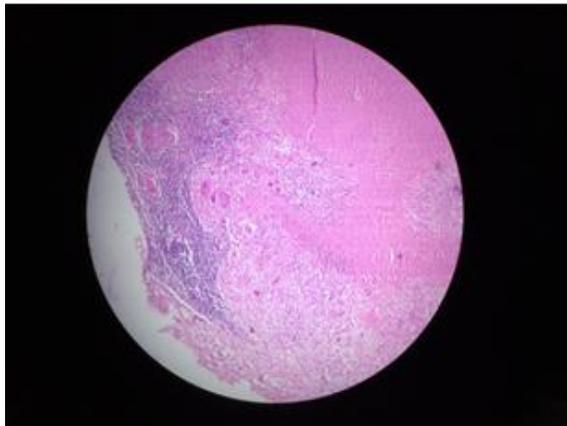
Tuberculosis (TB) is an endemic disease in developing countries and estimated to affect about one third of the world population<sup>[3]</sup>. Extra pulmonary TB accounts for nearly 7-30% of TB cases and lymphadenitis accounts for 17-43% of the cases. Lymph node tuberculosis is second when comes to extra pulmonary tuberculosis. Cervical lymph node constitutes the most common site of involvement with axillary nodal involvement is affected in 3.8-20.3% of tuberculous lymphadenitis<sup>[4]</sup>. Tuberculous lymphadenitis presents as a painless, slowly progressive swelling of a single group of nodes and in 85% of cases involvement is unilateral<sup>[5]</sup>. It may resemble breast carcinoma or exist both at the same time resulting in diagnostic and therapeutic challenges<sup>[6]</sup>. It must also be differentiated from accessory breast tissue and lipoma in axilla. Diagnosis is confirmed by histology.

We present this case of a primary axillary tuberculous lymphadenopathy in a healthy 30-year-old seronegative female with no evidence of previous or active pulmonary TB and no evidence of TB detected elsewhere in the body.

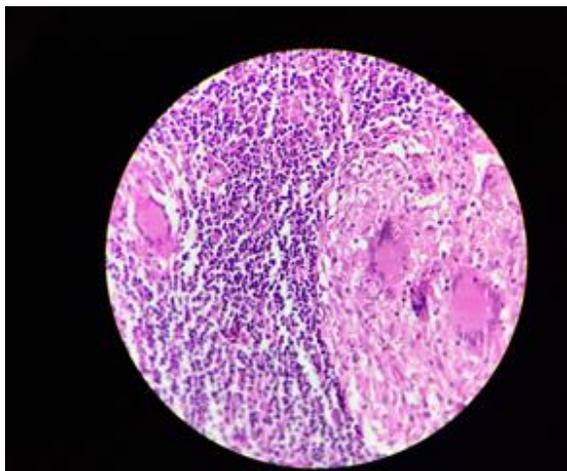
### Case details

A 30-year-old female patient presented in the outpatient clinic with a history of swelling in the left axilla which she noted one week back. The swelling gradually increased in size with history of occasional low-grade fever but no cough, anorexia or night sweats. Examination revealed a female in good health, having a discrete left axillary swelling that measured 6X6 cm, non tender, firm, smooth surfaced, rubbery and mobile; the contra lateral axilla was unremarkable. Both breasts and upper limbs were essentially normal. Investigations carried out included complete blood count - hemoglobin

11.8 g/dl, White blood cell,  $4.7 \times 10^3$  ul: Lymphocytes 38.1%, monocytes 9.9%, granulocytes 52%. Chest X-ray showed clear lung fields; human immunodeficiency virus I & II screening negative; fine needle aspiration cytology of the axillary swelling showed axillary lipoma. MRI left breast was done to rule out occult breast cancer. Excision biopsy was done. Gross examination showed 2 fibro-fatty masses which on cut section revealed innumerable nodes varying from 0.5 to 2.5 cm showing caseation necrosis. Microscopy showed lymph node with numerous granuloma with both foreign body and Langhans giant cells (fig 2) There were extensive areas of caseous necrosis with residual lymphoid tissue, consistent with tuberculous lymphadenitis (fig1).



**Figure 1**



**Figure 2**

Diagnosis was Left axillary tuberculous lymphadenopathy. She commenced anti-tuberculosis therapy with satisfactory therapeutic response. On followup after 1 month the left axilla was normal.

### Discussion

Increase in extra pulmonary tuberculosis has been reported in recent years especially the subset of human immunodeficiency virus (HIV) infected patients, but tuberculous lymphadenopathy in HIV seronegative patients continue to be described and may indicate poor control measures with adverse impact on disease control<sup>[7]</sup>, as with this rare report of an isolated axillary lymphadenopathy. Axillary tuberculous lymphadenopathy being rare, presents a problem of differential diagnosis with occult breast carcinoma, and has a major prevalence between 20-50 years old, which was in keeping with our patient aged 30 years<sup>[8]</sup>. The major diagnostic challenge on clinical evaluation was that she had no history of constitutional symptoms of TB and no breast lesion on examination. The initial thought was that of a lymphadenopathy possibly from an occult breast carcinoma. Breast MRI revealed no such occult malignancy. The breast can be a primary site of TB but more commonly, it is secondary that spreads to the breast through the lymphatic system from the axilla. Our patient may have presented prior to this stage of development. The occurrence of TB with carcinoma is unusual but reported to coexist in axillary lymph nodes without pulmonary or mammary TB<sup>[9]</sup>. In a situation of diagnostic dilemma, the presence of calcifications on radiography should raise the possibility of TB even in the absence of exposure to TB. Fugii et al reported that X-ray is useful for a diagnosis of lymph node TB and should be suspected with the appearance of clustered calcifications in axillary lymph nodes<sup>[10]</sup>. This was not our experience as our patient may have

presented prior to this stage of calcification. FNAC is reliable as long as right tissue is aspirated as in this case. FNAC indicated it was a lipoma but clinical evaluation and eventual excision biopsy proved otherwise. Confirmation of diagnosis is by histology in keeping with our experience. Axillary tuberculosis lymphadenopathy remains a rare condition, and should be considered as a differential diagnosis along with breast carcinoma, accessory breast tissue and lipoma especially in patients living in endemic areas of TB.

### **Conclusion**

Isolated axillary tuberculosis is a rare entity with only handful of reported cases but it should be considered in the differential for isolated axillary swelling especially in the endemic regions. Carcinoma breast can present with with isolated axillary swelling and its existence along with axillary tuberculosis has also been reported so it must not be overlooked.

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