

Tuberculous Axillary Lymphadenopathy: A Case Report

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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 26-year-old female with one-year history of axillary swelling, clinical examination and investigations revealed no evidence of tuberculosis elsewhere. Diagnosis was by histology. Tuberculosis should be considered in patients residing in endemic areas with axillary lymphadenopathy.

Keywords: Isolated; Axillary lymphadenopathy; Tuberculosis

Introduction

Tuberculosis (TB) is responsible for a high burden of disease and estimated to affect one third of the world population with most in developing countries [1]. Extra pulmonary TB accounts for about 7-30% of TB cases and lymphadenitis accounts for 17-43% of cases. Cervical lymph nodes constitute the most common site of involvement with axillary nodes affected in 3.8-20.3% of tuberculous lymphadenitis [1,2]. Isolated axillary tuberculous lymphadenitis is rare and described in patients without previous or active pulmonary TB and no evidence of the origin of TB detected elsewhere [3,4]. Tuberculous lymphadenitis presents as a painless, slowly progressive swelling of a single group of nodes and in 85% of cases involvement is unilateral [5]. It may resemble breast carcinoma or exist both at the same time resulting in diagnostic and therapeutic challenges [1,6]. Confirmation of diagnosis is by histology [4]. We present this case of a primary axillary tuberculous lymphadenopathy in a healthy 26-year-old seronegative female with no evidence of previous or active pulmonary TB and no evidence of TB detected elsewhere in the body.

Case Report

A case report of a 26-year-old female who presented in the outpatient clinic with a history of swelling in the left 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 left upper limb lesions. Examination revealed a female in good health, two discrete left axillary swellings that measured 3×4 cm in diameter, mildly tender, firm, smooth surfaced, rubbery and mobile; the contra lateral axilla was unremarkable, breasts, upper limbs and other regions were essentially normal.

Investigations carried out included complete blood count, hemoglobin 12 g/dl, White blood cell, 5.8×10^3 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 and cytology of the axillary swelling was indeterminate.

She had left axillary lymph node biopsy; macroscopy showed, 3 lymph nodes with two matted together, the largest node measured 4.5×3×1.5 cm partly bisected, the cut surfaces were grayish with numerous creamy areas (Figure 1). Microscopy showed lymph node with numerous granuloma with both foreign body and Langhans giant cells. There were extensive areas of caseous necrosis with residual lymphoid tissue, chronic granulomatous inflammation consistent with tuberculosis (Figure 2a and 2b).



Figure 1: Left axillary lymph node.

Diagnosis was Left axillary tuberculous lymphadenopathy. She commenced anti-tuberculosis chemotherapy with satisfactory therapeutic response. Four months post chemotherapy the left axilla was normal.

Discussion

Increase in extra pulmonary TB had been reported in recent years including the subset of lymphadenopathy in non-human immunodeficiency virus (HIV) patients in keeping with this rare report of an isolated axillary lymphadenopathy [2,5]. Despite the new component introduced to the epidemiology of TB with the advent of HIV infection with extra pulmonary TB including lymphadenopathy TB being more common, tuberculous lymphadenopathy in HIV seronegative patients continue to be described and may indicate poor control measures with adverse impact on disease control [2].

Axillary tuberculous lymphadenopathy is rare, presents a problem

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Received July 20, 2013; Accepted August 14, 2013; Published August 17, 2013

Citation: Nwagbara VI, Asuquo ME, Akpan S, Nwachukwu IE, Nnoli M (2013) Tuberculous Axillary Lymphadenopathy: A Case Report. J Trop Dis 1: 113. doi:10.4172/2329-891X.1000113

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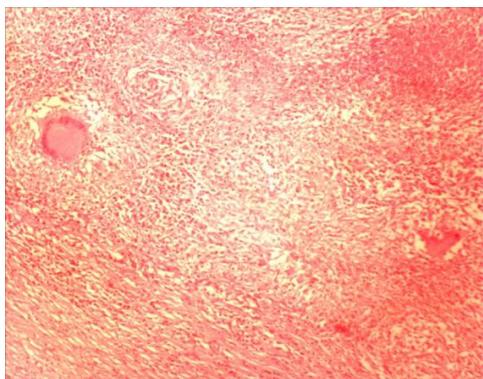


Figure 2a: Chronic granulomatous inflammation, consistent with tuberculosis. H&E x40.

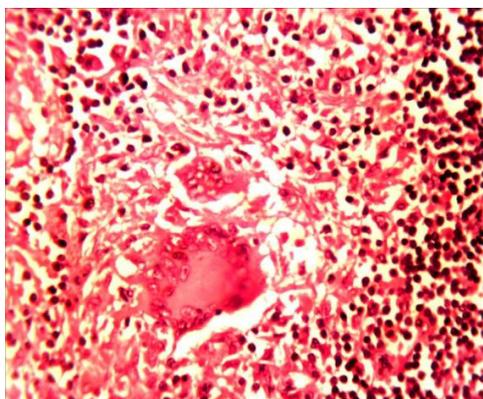


Figure 2b: Chronic granulomatous inflammation, consistent with tuberculosis. H&E x100.

of differential diagnosis with breast carcinoma, and has a major prevalence between 20-50 years old, which was in keeping with our patient aged 26 years [7,8]. 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. The breast can be a primary site of TB but more commonly secondary that spreads to the breast through the lymphatic system from the axilla [4]. 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 [9].

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 [10]. 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 [11]. This was not our experience as our patient may have presented prior to this stage of calcification. Confirmation of diagnosis is by histology in keeping with our experience (Figure 2a and 2b) [4].

Axillary tuberculosis lymphadenopathy remains a rare condition, and should be considered in patients living in endemic areas of TB.

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