Case Report

PRIMARY MULTI-DRUG RESISTANT TUBERCULAR LYMPHADENITIS IN AN HIV INFECTED PATIENT

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Summary: Cervical lymphadenitis is a common extra-pulmonary manifestation of tuberculosis in HIV patient; nevertheless, it seems that the primary Multi Drug Resistant (MDR) involving extra-pulmonary site is uncommon. We report a case of tubercular lymphadenitis by multi-drug resistant strain of Mycobacterium tuberculosis in an HIV seropositive male, which has not been reported so far in literature. [Indian J Tuberc 2009; 56:157-159]

Key Words: Tuberculosis, Lymphadenitis, HIV Infection

INTRODUCTION

HIV infection is rising and is emerging as the most important risk factor for the developing tuberculosis in India. About 2.4 million people are infected with HIV, about half of which are co-infected with M. tuberculosis¹.

Primary MDR extra-pulmonary tuberculosis is an uncommon form of the disease, but it seems that due to increasing prevalence of drug resistant tuberculosis around the world, the number of cases of primary MDR tuberculosis presenting at extra-pulmonary sites is going to rise especially in patients with HIV infection. In this report, we present a 32 years’ old, HIV positive male with primary MDR lymphadenitis of cervical and axillary region.

CASE REPORT

A 32-year, non-smoker male was admitted to our hospital in July 2006 for investigation of enlarged left supraclavicular, lower cervical and left axillary lymph node. He had a positive history of non-specific fever, loss of appetite and weight but history of dyspnoea, chest pain, cough, sputum production and night sweats was absent. No history of any close contact with a recognized TB patient could be elicited. He was a tea stall keeper by occupation.

On physical examination, a mobile, non-tender, non-matted lymphnode of 2 x 3 cm size was observed in left lower cervical region along with two non-tender, matted lymph nodes of size 1.5 x 2.5 cm in left supraclavicular and one non-tender, non-matted lymph node of size 2.5 x 2.5 cm in left axilla (Fig. 1). No palpable lymph nodes were found in other sites. The physical examination of other

Figure 1: Lymph node swelling of size 2.5 x 2.5 cm in left axilla.

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organ systems was normal. The haematological and biochemical parameters were normal and a tuberculosis skin test for *M. tuberculosis* showed 7mm induration. X-ray chest PA view was unremarkable. Serum samples were positive for antibodies against HIV using HIV comb immunoassay (J. Mitra & Co. Ltd.), followed by HIV microlisa kit (J. Mitra & Co. Ltd.). Patient gave history of blood transfusion in past, that might be the possible source of infection. CD4+ cell count was 139/MicroL. Ultrasound examination of whole abdomen showed retroperitoneal lymphadenopathy and mild hepatomegaly. FNAC of left cervical and supraclavicular lymph node showed chronic granulomatous inflammation consistent with tuberculosis. The acid fast bacilli of the specimen were negative. For confirmation of diagnosis, pus was also sent for culture and sensitivity for tuberculosis by Lowenstein – Jensen method at an intermediate reference laboratory (New Delhi TB Centre, NRL).

Patient was put on anti-tubercular treatment (ATT) under DOTS, CAT-I. Pus aspirated from the cold abscess in the neck grew *M. tuberculosis* complex, resistant to Streptomycin, Rifampicin and Isoniazid. During this three month period till the availability of culture and sensitivity report, there was no significant improvement in lymph node size.

His ATT regimen was modified according to sensitivity report to Kanamycin, Ethionamide, Ethambutol, Pyrazinamide and Levofloxacin according to body weight. He was also put on anti-retroviral therapy (ART) (Lamivudine+stavudine+Efavirenz). Kanamycin was stopped after three months and remaining drugs continued (3 months of intensive phase and 15 months of continuation phase). At the end of eighteen months, complete resolution of lymph nodes occurred with some residual scarring (Figs. 2 & 3). ATT was stopped with continuation of ART. At the end of treatment, CD4+ cell count was 251/ microL.

**DISCUSSION**

Drug resistant tuberculosis has become a major public health problem since early 1990. The prevalence of primary multi drug resistant tuberculosis in India was estimated around 2-3%; however, this prevalence is 15-50% among previously treated cases.

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In HIV seronegative and immuno-competent patients, pulmonary tuberculosis is the commonest mode of presentation, while EPTB accounts for only 20% of cases but in HIV positive patients it accounts for nearly 50-55 %. Among extra-pulmonary tuberculosis, cervical lymphadenitis is the commonest presentation; nevertheless, it seems that the primary MDR of EPTB is an uncommon form of the disease in patients of HIV infection. The reported patient is the first HIV infected patient with primary MDR tubercular lymphadenopathy in India to the best of our knowledge.

![Figure 2](image1.png)

**Figure 2:** Axillary lymph node disappeared after treatment.

![Figure 3](image2.png)

**Figure 3:** Cervical lymph node healed by scarring.
This case also demonstrates the possibility, that even if the absolute number of CD4+ cell count appeared to be enough to prevent opportunistic infection, there is still always a chance of developing opportunistic infection.

Our patient tolerated second line ATT and antiretroviral therapy well without significant complications which has been similarly reported by others\(^4\).

With increasing prevalence of drug resistant TB cases around the world, such manifestations of disease, including the primary MDR tuberculosis at extra-pulmonary sites are expected to be higher than before, which brings emphasis on rapid and reliable diagnosis and increasing awareness of physicians to such presentations.

REFERENCES

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