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Case Report

CASE REPORT

An atypical initial presentation of AIDS as cryptococcal lymphadenitis

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Abstract

A patient complained of fever on and off, difficulty in swallowing and cough (with scanty expectoration) since one and a half months and weight loss over 2 months. On examination, pallor was found to be present. Then ultrasonography of abdomen was done and it showed mesenteric and retroperitoneal lymphadenopathy. Sputum for acid-fast Bacilli was examined and found to be negative but despite this, based on the epidemiological data, antitubercular therapy (ATT) was started but after 2 weeks no clinical improvement was found. Then, fine-needle aspiration cytology of lymph node was done and it resulted in the presence of cryptococcal lymphadenitis as the final report. Antifungal therapy was initiated with amphotericin B followed by fluconazole and there was clinical improvement. Ultrasonographical findings also supported it. Though it is a rare case (but not impossible) that cryptococcus is the cause of lymphadenopathy. Thus, in initial presentation of acquired immuno deficiency syndrome it should always be kept in mind that such cases may happen. In India, presuming *Mycobacterium tuberculosis* as the leading cause exposes the patient to unwanted hepatic and renal toxicity of ATT.

INTRODUCTION

Acquired immuno deficiency syndrome (AIDS) has varied presentation of which, lymphadenopathy is the most common manifestation at any stage of the disease due to different underlying causes [1]. Most common of them being the opportunistic infections and malignancy [2]. India is a tubercular endemic country. It gives a good tilt to assume tuberculosis as the most common cause of lymphadenopathy in HIV-infected patients. This background confuses the treating physician in some of the cases. Thus, broadening the thought spectrum we present here a case of cryptococcal lymphadenitis which is a very unusual initial presentation of AIDS. This is a case that very few studies have reported [3–5].

CASE REPORT

A 45-year-old male hailing from Dhanbad district of Jharkhand state working as a staff in a courier service reported to medicine OPD of Patliputra Medical College and Hospital (PMCH), Dhanbad with the chief complain of—soreness of mouth and difficulty in swallowing both solid and liquid since past 1 month, multiple episodes of fever on and off for one and a half months, mild cough with scanty expectoration and weight loss (not documented) since past 2 months.

Patient was apparently asymptomatic 2 months ago when his complaints started in the form of mild cough with scanty expectorations. It was gradual in onset, non-progressive, no diurnal variation. Symptoms sometimes showed relief on

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taking cough syrup containing codeine and dextromethorphan. The sputum was white in colour, non-blood tinged and mucoid in consistency. Patient also complained of loosening of clothes which used to fit him earlier.

Since past one and a half months, he complained of multiple episodes of fever on and off with no particular pattern. It was gradual in onset, non-progressive though little relief was seen on taking paracetamol. Gradually, the patient developed soreness of mouth and difficulty in swallowing both solid and liquid food items. It was gradual in onset with no complaint of burning sensation in mouth or heart burn.

Before the start of these complains or during this period, he was not on any drug (except for cough syrup and paracetamol).

On general physical examination, he was thin built, febrile, weighed 42 kg, BP 120/80 mmHg, pulse 96/min. Pallor was present. No icterus, clubbing, cyanosis, lymphadenopathy, oedema. On the examination of oral cavity, white keratotic lesions were seen over vestibular and buccal mucosa, suspected to be verrucous leukoplakia.

On systemic examination, no abnormalities were detected. Laboratory data revealed Hb 9.2 gm%, TC 2700/mm^3, neutrophil 79% and lymphocyte 21%. Ultrasonography (USG) of whole abdomen showed multiple retroperitoneal and mesenteric lymph nodes (largest being 28 mm).This made us think that the patient was suffering from abdominal tuberculosis which might have disseminated from the lungs. So, now sputum was analysed for acid-fast Bacilli which was negative. Rest all investigations like chest X-ray, electrolytes, kidney function test, random sugar, routine urine, liver function test and lipid profile were within normal limit. Then blood was tested for HIV I and II and was found to be positive for HIV I. Therefore, he was now registered at the Anti Retroviral Therapy centre of PMCH Dhanbad on 28-03-2017. CD_4 count was 58/mm^3 which signifies stage 4 of the disease.

Based on high clinical suspicion and the epidemiological data, his treatment was started with antitubercular therapy (ATT) Cat-I on 30-03-2017 (consisting of Isoniazid, Rifampicin, Pyrazinamide and Ethambutol) and HAART (consisting of Zidovudine, Lamivudine and Efavirenz) after 2 weeks on 14 April 2017 to avoid immune reconstitution inflammatory syndrome. Even after 2 weeks, no clinical improvement was seen in the patient which according to the literature is one of the criteria to state that the patient had tuberculosis and get cured following ATT administration. Failure of above treatment advised us to do USG guided fine-needle aspiration cytology (FNAC) of the retroperitoneal and mesenteric lymph nodes. Cytological reports showed large masses of round yeast like structure with negatively stained capsule admixed with lymphoid cells, plasma cells, foamy macrophages, epitheloid cells in the background of necrotic debris. These suggested a possibility of fungal (Cryptococcus) necrotizing granuloma involving the lymph nodes. No acid-fast bacilli were seen.

Following this report, ATT was stopped on 27 April 2017 and patient was referred to Rajendra Institute of Medical Science, Ranchi where he was treated with injection amphotericin B for 7 days followed by oral fluconazole and flucytosine. Flucytosine could not be continued after discharge from hospital due to financial constraints. After 15 days, patient came for follow-up and there was improvement in clinical symptoms and with the gain of 2 kg weight. The USG showed a decrease in size of the lymph nodes.

DISCUSSION

Cryptococcal infection is very much prevalent in people living with HIV (PLHIV) especially in developing country like India [6]. Approximately 1 million PLHIV are infected by this fungus and about 625 000 die annually [7]. The most common organ affected by this fungus in these patients is the central nervous system [8]. Lymphadenopathy due to cryptococcus is a very rare disease in PLHIV so any lymphadenopathy in AIDS patients should be thoroughly investigated. Though less but some such cases having similar picture have been reported from worldwide and India [9]. A case has been described in a research article by U. Banerjee about a patient from north-eastern India presenting with posterior cervical lymphadenopathy, fever and weight loss and was suspected to have tuberculosis. ATT, however, was ineffective. So, a lymph node biopsy was done which revealed abundant *Cryptococcus neoformans* cells. Following this, HIV seropositivity was suspected, and later confirmed. Afterwards, the serum was examined for cryptococcal antigen which was found to be positive. However, no CNS symptoms were present [10]. In a case report by Dogbey *et al*., final diagnosis was confirmed by lymph node biopsy but FNAC was suggested to diagnose such cases with both rapid and cost-effective method [3]. Often, such cases are overlooked because we rarely suspect about Cryptococcus being a cause of lymphadenitis. According to the Centre for Disease Control and Prevention guidelines, cryptococcosis is one of the AIDS-defining criteria. Almost similar chief complaint of fever and weight loss over 15 days duration in an AIDS patient was seen in case report by Chandanwale [5]. Finally, the diagnosis of supraclavicular lymphadenitis was pinned down to Cryptococcus which was diagnosed by FNAC. From the above case study and discussion, we hereby conclude that despite vast clinical experience and support from the epidemiology of a disease like 'tuberculosis' in India we should properly evaluate lymphadenopathy allowing FNAC as the minimum investigation. At times we miss this rare but important factor of lymphadenopathy in treating AIDS patients. This timely initiation of therapy shall also help to decrease the morbidity and mortality due to cryptococcosis in such patients.

CONFLICT OF INTEREST STATEMENT

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CONFLICT OF INTEREST

The authors declare that they have no competing interests.

ETHICAL APPROVAL

Not required.

PATIENT'S CONSENT

Consent from the patient has been obtained.

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