Bilateral Inguinal Lymphadenopathy Presenting as Tuberculosis in a Case of Carcinoma Rectum

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Abstract

Isolated bilateral inguinal tubercular lymphadenitis is a very rare presentation. A 59-year-old male, on treatment for Carcinoma rectum (T3 N1 M0) presented with bilateral inguinal lymphadenopathy. Metastasis and tuberculosis were considered for differentials. FNAC of the lesion showed necrotizing granulomatous lymphadenitis. There was regression of the lesion on both sides after two months of Anti-tubercular Therapy. Even though Metastasis is the commonest cause of inguinal lymphadenopathy in a case of carcinoma rectum, Tuberculosis needs to be considered in the differential diagnosis in our country. FNAC/Biopsy can be considered in those patients to confirm the diagnosis.

Keywords: Bilateral inguinal, carcinoma rectum, extrapulmonary tuberculosis, tubercular lymphadenitis

Introduction

Tubercular infection of the inguinal group of lymph nodes occurs rarely and is usually associated with the cutaneous type (scrofuloderma or lupus vulgaris) of tuberculosis (TB).[1] Isolated inguinal tubercular lymphadenitis without pulmonary and cutaneous involvement is very rare.[1] Inguinal lymphadenitis, though rare in nature, always presents bilaterally.[2] In a known case of carcinoma rectum presenting with bilateral inguinal lymphadenopathy, metastasis is the most commonly considered etiology. We are reporting here a case of isolated bilateral tubercular lymphadenopathy in a case of adenocarcinoma rectum on treatment.

Case Report

A 59-year-old male presented to us with bilateral inguinal lymph node swelling and pain for 1 month. He was diagnosed to have carcinoma rectum (T3 N1 M0) 9 months back, for which he underwent abdominoperineal percutaneous resection 4 months back followed by 33 cycles of radiotherapy and 4 cycles of chemotherapy. He developed swelling over the inguinal region first on the left side followed by the right side. At the time of presentation, the swelling on the left side had ruptured, forming an ulcer with slough over it. He did not give any history of loss of appetite, loss of weight, fever, and cough.

On examination, patient was well built and nourished, vital signs were normal, with no pallor, icterus, or clubbing. On local examination, he had bilateral inguinal lymph node swelling, with left more than right. Left side measured 4 cm × 2 cm and was tender on touch [Figure 1], with ulcer and slough covering the swelling. Right side inguinal lymph node measured 3 cm × 2 cm and was also tender on touch. He had a colostomy bag attached over left side of lower abdomen.

His investigations revealed hemoglobin 9.4 g%, total leukocyte count 6500/cumm, neutrophils 80%, lymphocytes 14%, monocytes 4%, and eosinophil 2%. Chest X-ray did not reveal any abnormality. Fine-needle aspiration cytology (FNAC) of left inguinal lymph node was done. It showed necrotizing granulomatous lymphadenitis [Figure 2a and b] and Ziehl–Neelsen stain showed acid-fast bacilli.

Patient was initiated on Category 1 ATT under DOTS (rifampicin, isoniazid, ethambutol, and pyrazinamide). Patient was followed periodically. At the end of 2 months of ATT, there was regression of the lesion on both sides.

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intensive phase, there was regression of lymph node on both sides [Figure 3].

Antitubercular therapy was continued for 4 more months. At the end of 6 months of antitubercular therapy, the lymph nodes completely regressed [Figure 4].

**Discussion**

Extrapulmonary TB constitutes approximately 30% of all TB cases in tertiary care centers in India.[3] Among extrapulmonary TB, lymph node involvement is the most common cervical TB being the most common followed by axillary and inguinal in pediatric age group.[4] The portals of entry for *Mycobacterium tuberculosis* are lungs, tonsils, and intestine, rarely through skin. The disease spread through lymphatics to the regional lymph nodes and then to the bloodstream.[5]

Studies have shown that cervical group is the most common site to be involved whose incidence ranges from 74% to 90%, followed by axillary group in 14%–20% cases and inguinal group in 4%–8% of cases in pediatric age group.[4] Isolated inguinal lymph node TB is rare.[1,6,7] Our case is probably the only case; wherein the background of carcinoma rectum, the inguinal lymph nodes were found to be tubercular in origin, where the first differential would be metastasis. Routinely, the drugs used in treatment of pulmonary TB are effective for tubercular lymphadenitis too.[5] as in our case, 6 months of antitubercular therapy was sufficient to cure the disease.

FNAC is a reliable diagnostic tool in the diagnosis of TB adenitis. Dandapat et al. in 1990 found 66 cases out of 88 (83%) positive on FNAC.[9] Further, FNAC avoids the risk of development of scar or fistula, a frequent complication associated with surgical biopsy.[10]

**Conclusion**

Isolated bilateral inguinal TB in the background of carcinoma rectum is rare, but in a country like India where TB is highly prevalent, it should be included in the differential diagnosis.

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**Conflicts of interest**

There are no conflicts of interest.

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