

Case Report

Isolated tuberculous inguinal lymphadenopathy: a diagnostic challenge

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ABSTRACT

Lymph node is one of the commonest site for extra pulmonary tuberculosis (TB). Cervical lymph nodes are most commonly affected by TB. Whereas tuberculous inguinal lymphadenopathy is quite uncommon. Isolated bilateral tuberculous of the inguinal lymph nodes is rare and poses a diagnostic challenge to the surgeon. Lymph node biopsy is diagnostic. A case of bilateral tuberculous inguinal lymphadenopathy diagnosed by open biopsy is presented to highlight the diagnostic challenges it poses in addition to creating awareness of its existence as a distinct entity unrelated to tuberculosis of the lung and bowel.

Keywords: Tuberculosis inguinal lymphadenopathy, Diagnosis, Treatment

INTRODUCTION

Lymph node is one of the commonest extra pulmonary primary sites for tuberculosis. The common lymph node groups involved are cervical (75-90%), axillary (14-20%) and inguinal (4-8%).^{1,2} On the Indian subcontinent inguinal lymph node involvement is more common than axillary lymph node involvement.³ Isolated inguinal lymphadenopathy by itself is uncommon and has a varied aetiology. It may closely mimic other surgical conditions like inguinal hernia, especially in cases presenting as isolated inguinal lymphadenopathy. A case of isolated tuberculous bilateral inguinal lymphadenopathy diagnosed by open biopsy is presented to highlight the possibility of tuberculosis as being the cause of lymphadenopathy as well as to highlight the possibility of the lesion closely mimicking an inguinal hernia.

CASE REPORT

An 81 year old male patient presented with complaints of rapidly enlarging right sided groin swelling. Patient gave history of fever which was variable in nature, weight loss and anorexia. Patient had history of CABG done 7 years

back with history of cerebrovascular accident 3 months back. Patient did not have a history of Koch's or Koch's contact. Patient consulted his family physician who advised medications with no therapeutic benefit. On examination vital parameters were within normal limits. Examination of the neck did not reveal any swelling. Physical examination of the right inguinal region revealed a large mass measuring 10 cm horizontally and 5cm vertically. The consistency was firm. There were multiple such swellings lower down in the right femoral region as well. There were similar but smaller lymph node masses palpable in the left groin. There was no visible or palpable impulse on coughing in the inguinal mass. Abdominal examination was unremarkable. Chest examination was unremarkable. Complete blood count revealed haemoglobin of 11gm%. Erythrocyte sedimentation rate was 55 at end of 1 hour. X ray chest was within normal limits. Ultra-sonography of abdomen didn't reveal any abnormality. An open surgical biopsy of right groin lymph node was done. The specimen comprised of a fused mass of lymph nodes (Figure 1). The entire mass overlying inguinal region, extending below the inguinal ligament into the femoral region was excised. The cord was normal. The femoral canal was

also normal with no evidence of any hernia sac (Figure 2). Histopathological evaluation of the mass revealed features pathognomonic of tuberculosis (Figure 3). Anti-koch's treatment with intense four drug therapy was commenced. Patient currently is under therapeutic surveillance with good response to anti-koch's treatment.



Figure 1: Specimen of the lymph node mass.

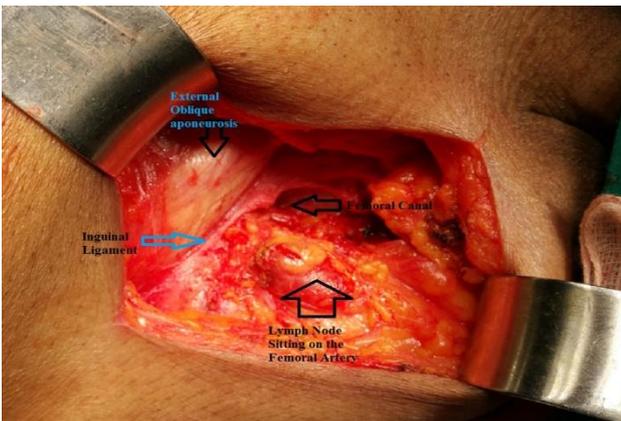


Figure 2: Dissected right inguinal region during the course of a lymph node biopsy; (external oblique aponeurosis, inguinal ligament and femoral canal exposed after removal of a big mass of lymph nodes).

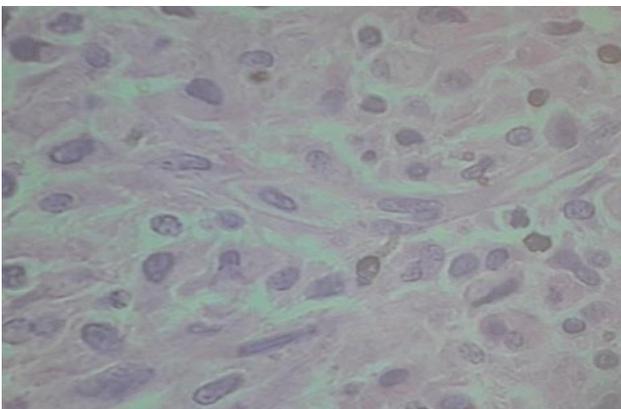


Figure 3: Histopathological evaluation reveals epithelioid cells diagnostic of tuberculosis. (H & E staining, magnification 40X).

DISCUSSION

Cervical lymphadenopathy especially in the posterior triangle is the commonest site for tuberculous lymphadenopathy.³ Isolated tuberculous lymphadenopathy in the groin is uncommon and accounts for 4-9% of cases.^{1,2} The lymph node mass overlying the inguinal region closely mimics an inguinal hernia. An elaborate clinical examination is of utmost importance. These swellings are devoid of visible and palpable cough impulse. Imaging techniques such as sonography may at times be misleading. The radiologist may report lymph node as an inguinal hernia. Surgical exploration of the inguinal region is the best option to confirm the diagnosis. Fine needle aspiration cytology is a very useful diagnostic tool for assessing aetiology of lymphadenopathy. However fine needle aspiration cytology may not be able to confirm the diagnosis in cases of lymphoma.^{4,5} Therefore inguinal exploration with open biopsy is the gold standard for diagnosis of inguinal lymphadenopathy. The pathogenesis of tuberculous inguinal lymphadenopathy is still unclear. Two hypotheses have been proposed. Haematogenous dissemination from a subclinical pulmonary focus or an isolated secondary involvement of inguinal nodes from lymphatic spread from the endosalpinx around the round ligament can be possibility.⁵ An intense six month anti-Koch's chemotherapy with two months of intense four drug anti-Koch's treatment followed by a four month two drug treatment schedule is the therapeutic. Most cases resolve with anti-Koch's treatment. However in selected few cases residual mass may necessitate surgical excision.⁶

CONCLUSION

Although isolated tuberculous inguinal lymphadenopathy is a distinct entity, it requires high degree of suspicion for diagnosis.

Radiological investigations may misdiagnose a groin lymph node mass as an inguinal hernia which one needs to be aware of. A good clinical examination may help to rule out inguinal hernia.

An open lymph node biopsy is the best option for a confirmed diagnosis.

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