Calcified cervical lymph nodes

CALCIFIED CERVICAL LYMPH NODES - A UNIQUE PICTURE

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ABSTRACT

Lymph node calcification is typically a marker of lymph node disease with various infectious and non-infectious diseases or their sequel. We are presenting X-ray neck of the patient having very interesting anatomical pattern of lymph node calcification. The X-ray shows bilateral diffuse pattern of lymph node calcification.

Key words: Lymph node calcification, lymphadenitis

INTRODUCTION

Lymph nodes act as filters or traps for foreign particles and are important in the proper functioning of the immune system. They are packed tightly with the white blood cells called lymphocytes and macrophages. They become inflamed or enlarged in various conditions, which may range from trivial, such as a throat infection, to life-threatening such as cancers. The calcification of lymph node is a marker of nodal disease, whether active or a sequel of prior disease.

CASE REPORT

A 35 years old female presented with neck pain and no other relevant clinical history. Her complete blood counts, urinalysis, blood sugar, LFT, KFT were non-contributory. Patient was seronegative for HIV. FNAC from cervical lymph node yielded scanty aspirate which on smear showed scanty cellularity containing only few fibroblasts and collagen fibers with lymphocytes and macrophages in background suggestive of scarred tissue or healed chronic lymphadenitis. We diagnosed the case as healed tuberculous lymphadenitis. Her X-ray neck antero-posterior (Figure 1) and lateral (Figure 2) view showed anatomical pattern of lymph node calcification. Her X-ray shows unique anatomical pattern and since bilateral calcification of cervical lymph node is rare. This prompted us to present this case.
Figure 1. X-ray neck antero-posterior view showing calcified lymph nodes in anatomical distribution.
Figure 2. X-ray neck lateral view showing calcified lymph nodes in anatomical distribution.
DISCUSSION

Lymph node calcification is typically a marker of lymph node disease, with prior granulomatous disease being the most common etiology. Benign causes of lymph node calcification are infectious etiologies such as tuberculosis, histoplasmosis, coccidioidomycosis and aspergillosis, and non-infectious causes such as silicosis. Malignant causes of calcified lymph nodes are lymphoma, metastatic thyroid carcinoma, mucinous adenocarcinoma and rarely squamous cell carcinoma. Rarely, artifacts may simulate lymph node calcification. Tuberculous cervical lymphadenitis (also known as Scrofula and King’s evil) is most common presentation of extra-pulmonary tuberculosis (TB). TB is responsible for up to 43 percent of peripheral lymphadenopathy in the developing world. In rural India, the prevalence of tuberculous lymphadenitis in children up to 14 years of age is approximately 4.4 cases per 1000. The present epidemic of human immunodeficiency virus (HIV) is associated with an increase in incidence of miliary, disseminated and extra pulmonary TB cases including lymphadenitis.

Cervical nodes are the most commonly affected nodes in tuberculous lymphadenitis, in about 63% of cases, followed by mediastinal (27%) and axillary nodes (8%)6. Among cervical lymph nodes, posterior triangle are most common lymph nodes (51%) followed by deep upper cervical lymph nodes (48%). In the majority of cases lymphadenitis is unilateral7. Bilateral diffuse cervical lymph node involvement is unusual and this presentation prompted us to present it. Cervical lymph node calcification is a rare condition. In one study, only 1% of the 2300 neck CT scans revealed cervical lymph node calcification7. The incidence of cervical lymph node calcification in lymph node tuberculosis was reported to be in the range 6–7%8–9. The condition occurs most often after caseation of the node or after treatment9. A study of pattern and distribution of mediastinal lymph node calcifications using CT scan in tuberculosis and sarcoidosis showed that nodal calcification was present in 26 fo 49 (53%) sarcoidosis patients and 13 of 28 (46%) TB patients10.

CONSENT

Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

COMPETING INTERESTS

The authors declare that they have no competing interests.

REFERENCES


