ABSTRACT

Objectives: To describe a rare case of syphilitic lymphadenitis diagnosed via fine needle aspiration biopsy (FNAB). To review the pitfalls associated with the diagnosis of syphilitic lymphadenitis.

Methods: The patient’s medical records were reviewed. The pertinent history, clinical course, and results of ancillary studies are presented.

Results: FNAB with silver staining is an effective, non-invasive way to confirm the diagnosis of syphilitic lymphadenitis.

INTRODUCTION

Head and neck manifestations of syphilis can be found in all three stages of the disease process. Chancres of primary syphilis may appear on any mucosal surface, most commonly the lip.

As the infection becomes systemic, patients may present to the otolaryngologist with a wide variety of lesions including nodules, rashes, and ulcerations with or without pain.

Cervical lymphadenopathy may be present with constitutional symptoms. Tertiary syphilis can manifest in the head and neck as gummatous lesions, and is one of the possible causes of sensorineural hearing loss. Isolated cervical lymphadenopathy is a relatively rare presentation of syphilis, with only a few cases reported in the recent literature.

CASE REPORT

- A 37 year-old man presented with a two-month history of a growing neck mass, night sweats, and a ten-pound weight loss. The patient had been treated one month earlier for primary syphilis. Examination of the head and neck revealed a 3 cm right level II mass with no other lesions.

- Serological tests were negative for EBV, CMV, HIV, HAV, HBV, HCV, and toxoplasma. The reactive plasma reagin (RPR) was 1:16 and fluorescent treponemal antibody absorption (FTA-ABS) was positive, consistent with his recent history of syphilis. A PPD was negative.

- A CT scan of the neck was remarkable for multiple enlarged homogeneous lymph nodes of the right neck at levels II and III suspicious for metastatic lymphadenopathy, as well as smaller nodes at levels I and IV.

- Fine needle aspiration (FNA) of the dominant right neck mass was then performed. Microscopic examination showed a heterogeneous population of lymphoid cells including blast/germinatal center aggregates and intermediate and small-sized lymphocytes (Figure 1).

- Steiner stain (a silver stain) performed on a cell block slide revealed variably sized spirochetes (Figure 2).

- Based on the FNA results, the patient underwent a second treatment regimen for syphilis. Three months later, he reported an improvement in symptoms. His RPR had decreased and a repeat CT scan revealed a near complete resolution of his lymphadenopathy.

DISCUSSION

- Isolated cervical lymphadenopathy is a rare presentation of syphilis. Clinical suspicion based on history and physical exam can usually be confirmed with serological studies.

- Prior antibiotic treatment may confound the diagnosis by preventing detection of the initial chancre and eliminating spirochetes from histological specimens, without completely clearing the body of the infection.

- When serology is not convincing, fine needle aspiration is a fast, effective, and relatively noninvasive tool for the diagnosis of isolated syphilitic lymphadenitis. Accurate interpretation of FNA cytology may prevent the need for an open biopsy.

- The typical cytological features of syphilitic lymphadenitis include reactive follicular hyperplasia with a heterogeneous population of lymphoid cells. Modified silver staining of the aspirate can be performed in order to visualize the spirochetes.

CONCLUSIONS

Isolated cervical lymphadenopathy is a rare presentation of syphilis. However, it should be included in the differential diagnosis for patients who offer a suspect history. FNA with silver staining is an effective, non-invasive way to confirm the diagnosis.

REFERENCES