NON-HODGKIN'S LYMPHOMA OF TONSILS

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ABSTRACT

It is well known that non-Hodgkin's lymphoma of various histologic types, including Burkitt's lymphoma and chronic lymphocytic leukemia (diffuse well-differentiated lymphocytic lymphoma), frequently appears in the oral cavity's soft tissues, including the soft palate and Waldeyer's ring. An unusual case of non-Hodgkin's lymphoma primarily with tonsillar involvement was evaluated. The clinical course of the disease was presented with the current literature search.

Key Words : Non-Hodgkin's, Lymphoma, Tonsil.

INTRODUCTION

Non-Hodgkin's lymphomas represent a small percentage of head and neck cancers. Cervical adenopathy is one of the most common presenting sign for patients with lymphoma. Approximately 10% of patients with lymphomas will present extranodal head and neck sites (1-3). These sites include Waldeyer's ring (lymphatic tissue in the tonsil, nasopharynx, and base of tongue) and extralymphatic involvement of tissue adjacent to lymph nodes, such as paranasal sinuses, salivary glands, oral cavity and larynx (4-5).

Lymphoma occurs especially in the palatine tonsils. These lesions may be unifocal or may involve many areas, particularly palatine tonsils. They are more likely to be large and the surgeon is surprised to find such a large lesion with a relatively brief history of symptoms. Tonsil is grossly enlarged. Involvement of the tonsil may be the first symptom of systemic lymphoma, which may be spread in the body.

CASE REPORT

A 72 year-old man was presented in May-1994 with a history of a mass in the mouth. The mass had been first noticed 3 weeks previously and continued to enlarge. He was diagnosed and treated as cryptic tonsillitis for 10 days before presenting our clinic.

He was otherwise well, and had no history of fever, nightsweats, malaise or weight loss. On physical examination, a 5x5 cm mass was noted on the left tonsillar fossa. He was also hoarse, but there were no palpable cervical nodes.

His white blood count was 4800 cells/mm3 with 4% bands, 57% polys, and 39% lymphocytes. Hemoglobin was 10,9g/dl. He had also other laboratory determinations, including lactic dehydrogenase and alkaline phosphatase levels-lumbar puncture; a chest roentgenogram; and bone marrow biopsy which were all in normal values. ACT scan of the retroperitoneum, pelvis and abdomen was negative.

ACT scan of the head and neck showed a mass lesion originating from the left tonsillar fossa and protruding into the oropharengeal passage and nasopharyngeal area. Soft palate was also distorted on the left side (Fig 1).

An excisional biopsy was performed and histopathological analysis of the mass showed non-Hodgkin's lyphoma of the "intermediate grade" diffuse mixed small and large cell type (Fig 2).

DISCUSSION

Lymphomas are separated into two histopathologic groups: Hodgkin's disease and non-Hodgkin's lymphomas. The cause of most of the non-Hodgkin's lymphoma is unknown. However, some occur with increased frequency in patients with certain viral infections, immunoproliferative states, and immunosupressed states. Rappaport system has been the most widely used system for histologic classification of non-Hodgkin's lymphomas. As our knowledge has been improved about the immune system and immune cells- each type of lymphoma

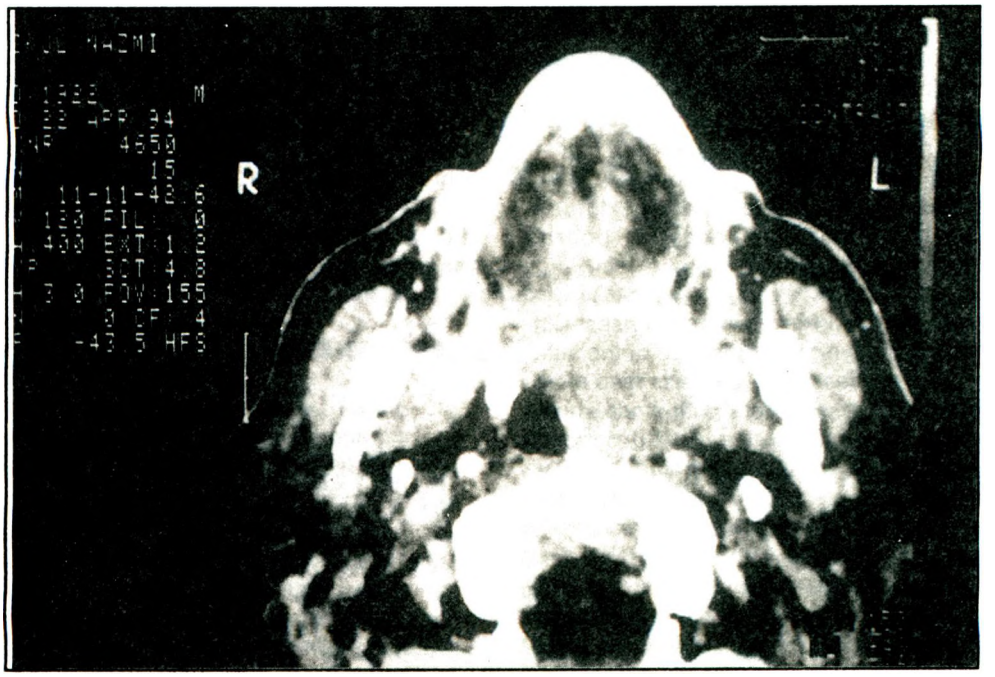

Fig. 1: *CT imaging showed a mass originating from left tonsillar fossa.*

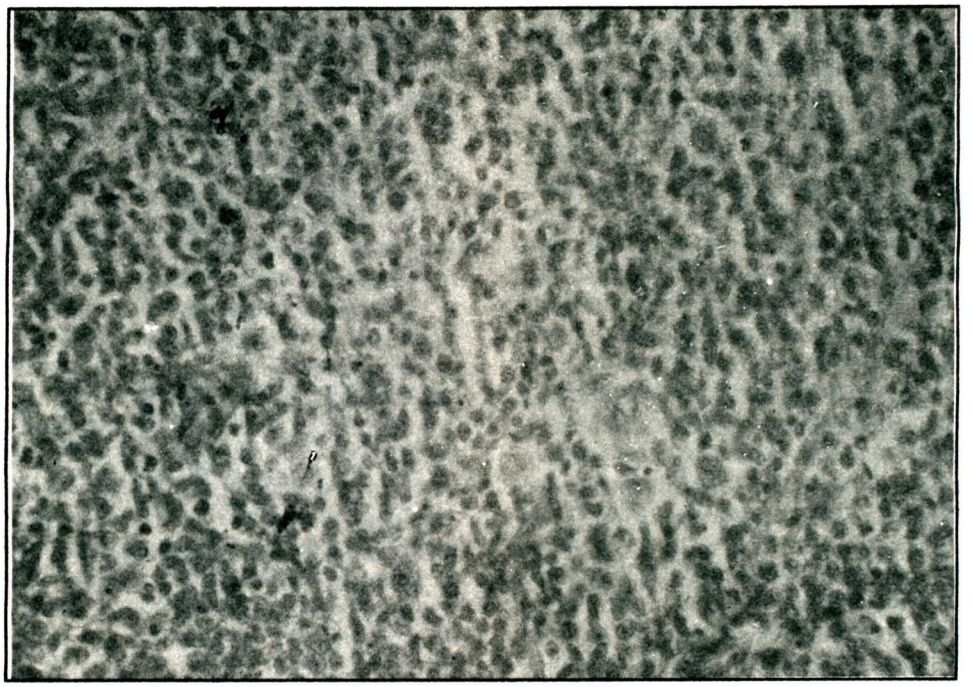

Fig. 2: *Histopathological analysis confirmed non-Hodgkin's lymphoma.*

has been better defined and the validity of the Rappaport classification system has been challenged. National Caner Institute developed a new system: the Working Formulation. This system divides lymphomas into three major subgroups: low-grade, intermediate-grade and high-grade (6). Most patients with head and neck lymphomas have unfavorable subtypes, predominantly diffuse histiocyte and diffuse lymphocytic poorly differentiated lymphoma (4,7-8).

The incidence of non-Hodgkin's lymphoma rises with increasing age, so it is typically a disease of the fifth, sixth and seventh decades of life. It effects men more frequently than women. Patients with nodal non-Hodgkin's lymphomas often present with cervical adonopathy, with equal instances of high and low cervical node enlargement. Unlike Hodgkin's disease, a substantial fraction of patients with non-Hodgkin's lymphomas, especially those with diffuse large-cell types, will present with both nodal and extranodal involvement (9-10). The most frequently involved site is Waldeyer's ring. Within Waldeyer's ring, the tonsil and nasopharynx are the most common sites of the disease. Outside Waldeyer's ring, nasal cavity and paranasal sinuses are the most common extralymphatic sites of head and neck lymphomas (11-12).

In involved sites which are less likely to be contiguous, the mediastinum is less and the abdomen is more likely to be involved, and few patients (less than 10%) have truly localized disease. Extranodal involvement is common, and primary extranodal lymphomas are in bone, brain, stomach, intestine and kidney. Patients with tonsillar lymphoma may present local symptoms of sore throat, a lump in the throat, dysphagia and speech disturbances. The age and sex distrubition, as well as the presenting symptoms of lymphomas are similar to head and neck squamous cancers and they can generally only be distinguished by biopsy. For diagnosis; if at all possible, excisional biopsy of a large lymph node is preferred. Treatment program must be based on histology, primary site of involvement, stage of disease, and individual patient considerations. Patients with stage I or stage II disease, radiation alone is appropriate therapy. For patients with stage III and IV, combination chemotherapy is recommended and there are a variety of combinations including cyclophosphamide, doxorubicin, vincristine sulfate and prednizone (CHOP) or methotrexates, bleomycin sulfate, doxorubicin, cyclophosphamide, vincristine sulfate and dexamethasone (M-BACOD). Cure rates to combination chemotherâphy may vary from 25% to over 50% (7).

The low-grade lymphomas have an inherent median survival of 7 years, but in spite of a high response rate to chemotherapy, they do not have improved survival with aggresive therapy. The majority of the intermediate-grade lymphomas, of the large cell type, have a 30% cure rate with aggresive combination chemotherapy (1,13). The highgrade lymphomas have an inherent median survival of 1 year or less, but a significant fraction can now be cured with aggresive chemotherapy.

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