

Malignant lymphoma of nasal septum – A case report

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Summary

Malignant lymphoma of nasal septum is uncommon. It presents a problem in diagnosis to both otorhinolaryngologist and pathologist. This case report is about one such patient in whom the local disease has been controlled with the treatment of radiotherapy alone. However it is suggested that combined treatment of radiotherapy and cytotoxic therapy might improve the survival rate.

Key words: Malignant lymphoma, nasal septum.

Introduction

Malignant lymphoma of nasal septum is very rare. Involvement of the nose and paranasal sinuses occur only in less than six percent of lymphomas affecting the head and neck¹.

The condition usually mimics carcinoma in its clinical and radiological presentation and may give problems in the diagnosis even on histological examination. The histologic classifications of malignant lymphoma are confusing as the nomenclature is constantly changing. However with the specific immunohistochemical technique, the malignant lymphoma can be detected precisely and the disease can be controlled with combined treatment of radiotherapy and cytotoxic therapy.

Case History

Mr LWL, a 48 year old Chinese school teacher, complained of a slow progressive bilateral nasal obstruction of two months duration. This was associated with dry crusts and occasional epistaxis bilaterally. He also felt the swelling in both nostrils one month prior to admission. There were no other symptoms of significance. He was also a known hypertensive on regular treatment and he was a non-smoker and non-alcoholic.

On examination, his general condition was satisfactory, the blood pressure and pulse rate were normal. There was no pallor. Anterior rhinoscopy revealed an ulcerative friable mass on both sides of the nasal septum. There was erosion of the nasal septum. The tumour did not extend into the post nasal space. There were no neurological signs and no lymph nodes palpable. A biopsy of the tumour was done. The histology showed the fragments of tissue exhibiting diffuse infiltration by malignant lymphoid cells with vesicular nuclei, some with prominent nucleoli and indistinct cytoplasmic borders (Fig 1). These histological features were consistent with those malignant lymphomas of T-Cell type.

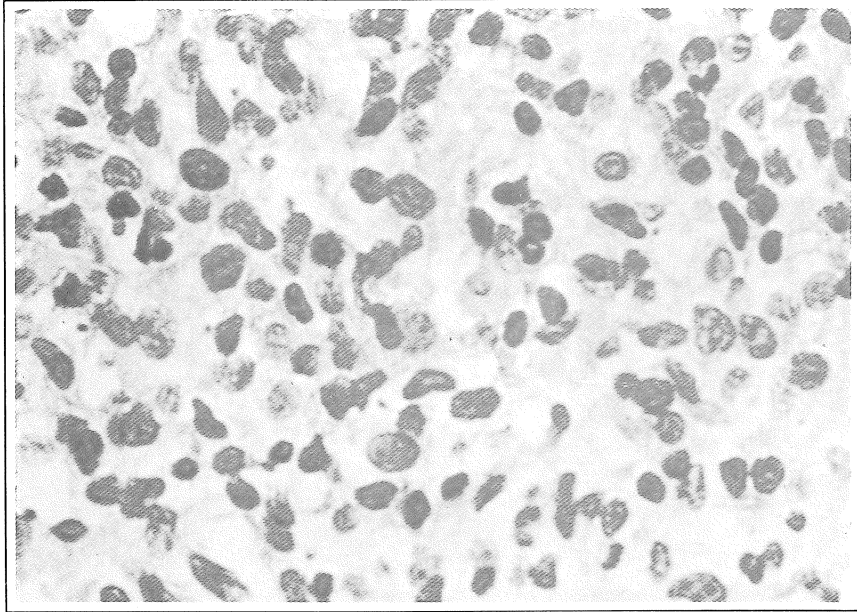


Fig. 1: Malignant lymphoid cells exhibits diffuse infiltration the area.
(x 500)

This was further supported by immunohistochemical stains which showed a T-phenotype. A computerised axial tomography showed the tumour involving the anterior part of the nasal septum, causing the erosion of the septal cartilage (Fig 2). Computerised axial tomography of the neck, thorax and abdomen did not reveal any significant lymph nodes enlargement. The bone marrow aspiration biopsy revealed normal cellular infiltration. The patient was subjected to external beam radiotherapy. He received about 4,500 rad. in fractions for six weeks. He had tremendous improvement of the airway within two weeks of treatment. The septal mass totally regressed after he completed six weeks treatment. However he developed a lot of crusting and dryness of the nasal cavity secondary to the irradiation which was treated with 25% glucose in glycerine nasal application.

He was followed up regularly for almost a year and no evidence of local recurrence nor any systemic manifestations were noted.

Discussion

The lymphomas in the head and neck are either of nodal or extranodal origin, the malignant lymphoma of nasal septum is an example of the latter. The incidence of malignant lymphoma of nasal septum is very rare. Involvement of this site only constitutes 1.7 percent of all lymphomas². The peak incidence of malignant lymphoma of nose and paranasal sinuses in Malaysia occur in the third and fourth decades of life³ with no sex predominance.

Evaluation of the extent of regional disease is of considerable importance as it affects the planning of treatment. The nose and paranasal sinuses are difficult to examine clinically. The introduction of computerised axial tomography has made the task of determining the extent of disease easier. Computerised axial tomography should be a routine investigation, if available.

The diagnosis is established by histology. The task of the pathologist in identifying the specific features present in the lesion is hindered by surface crusting, necrosis and the inflammatory reaction which is a constant feature of this condition. Superficial biopsies may yield only a diagnosis of 'non-specific inflammation' and the clinician should be encouraged to take biopsies deeply or from ulcer

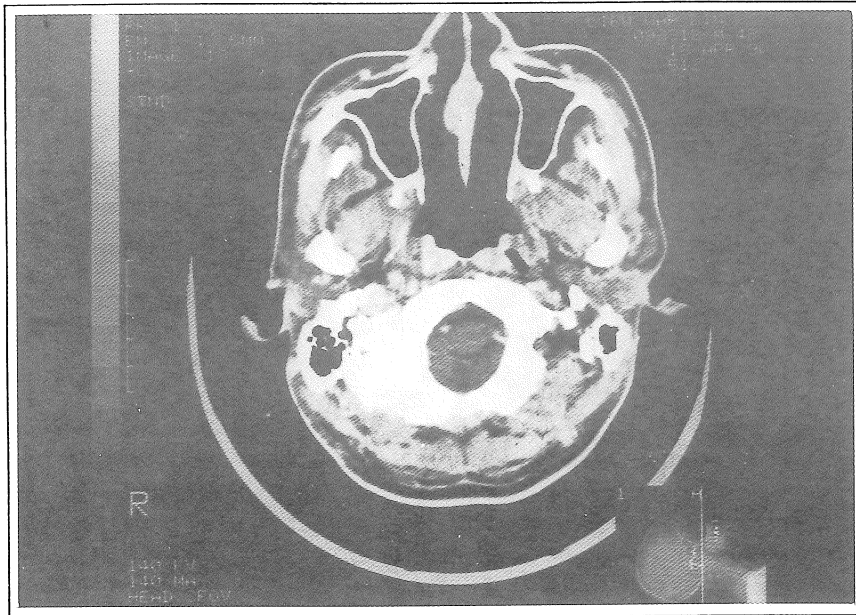


Fig. 2: CT Scan coronal section of paranasal sinuses shows localised tumour confined to nasal septal cartilage anteriorly

margins. Furthermore the case can be difficult to differentiate from undifferentiated carcinoma on histopathological examination. Monoclonal antibodies to cell markers have proved very useful in this respect and can often differentiate carcinoma from lymphoma. The former is identified by an excellent marker, epithelial membrane antigen whereas the latter is differentiated by leucocyte common antigen.

The primary modality of treatment of this disease is radiotherapy. Surgery is limited to the obtaining of material for histological diagnosis. Radiotherapy is usually effective in controlling head and neck lymphoma in the primary site when doses of at least 4,000 rads are administered⁴.

However, a retrospective study of thirty six cases over twenty years by Harrison⁵ showed that about fifty percent of the patients presenting with primary nasal lymphoma died with disseminated disease mostly within a year. All had lymphoma work up prior to starting radiotherapy with no evidence of regional or systemic lymphoma. Yet, evidence of marrow or extranasal lymphoma appeared between three and seven months following completion of radiotherapy. Local control was obtained in most cases but despite cytotoxic therapy all these patients died. Hence his experience suggests that a negative lymphoma is certainly no indication that disease will not disseminate. The use of cytotoxic therapy postirradiation in all identifiable nasal lymphoma appears reasonable in view of the lack of success in applying this treatment with established dissemination.

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