The Journal of Laryngology and Otology
February 1996, Vol. **110,** pp. 161–162

Non-Hodgkin's lymphoma presenting as an isolated temporal soft tissue swelling

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Abstract
Non-Hodgkin's lymphoma (NHL) of the head and neck has been described in several sites including the larynx, the pharynx, Waldeyer's ring, the nose and paranasal sinuses. NHL of the temporal region has not been previously described. We describe a 65-year-old woman with a diffuse swelling of the right temporal region. A histological diagnosis of NHL was made following complete excision of the lesion. No further treatment was given and there was no evidence of recurrence at six months.

Key words: Non-Hodgkin's lymphoma; Temporal region

Introduction

Lymphomas are the second most common malignant tumours of the head and neck following squamous cell carcinoma. They may present in cervical lymph nodes or in extranodal sites. Non-Hodgkin's Lymphoma (NHL) has been widely described in several head and neck sites including the nose and paranasal sinuses, Waldeyer's ring the larynx, pharynx, anterior and posterior triangles of the neck. We describe a case of primary NHL of the temporal region which to our knowledge has not been previously reported.

Case report

A 65-year-old woman presented with a two-month history of an enlarging painless swelling of the right temporal region which caused her discomfort when wearing glasses. The patient admitted to mild fatigue but was otherwise well. There was no loss of appetite nor weight. She was a non-smoker and did not drink alcohol. On examination she had a smooth mobile diffuse mass in the right temporal region measuring 1 cm at its largest diameter with no associated lymphadenopathy. Full head and neck and general examination was unremarkable. A clinical diagnosis of a lipoma was made and the lesion was excised. The tumour measured 1 × 1 cm and was yellow, soft and non-cystic. Light microscopy revealed mostly fat and connective tissue with a small amount of lymphoid tissue showing a NHL invading muscle tissue (Figure 1). Higher magnification (Figure 2) showed that the tumour had a follicular pattern with the follicles composed mainly of centroblastic-type cells with some centrocytes. Immunocytochemistry showed this to be a B-cell lymphoma.

The excision was complete with disease free margins. Routine blood tests, chest X-ray, CT scan of thorax, abdomen and pelvis were all normal. No treatment was given and follow-up at six months showed no evidence of recurrence.

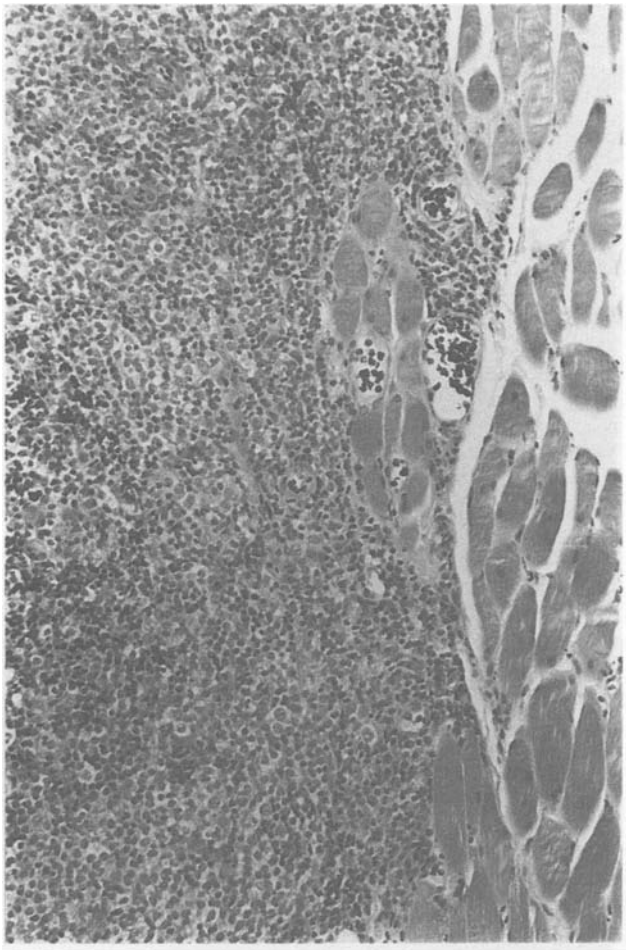

Fig. 1
Diffuse infiltrate of large lymphoid cells destroying muscle. (H & E; × 100).

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Accepted for publication: 18 November 1995.

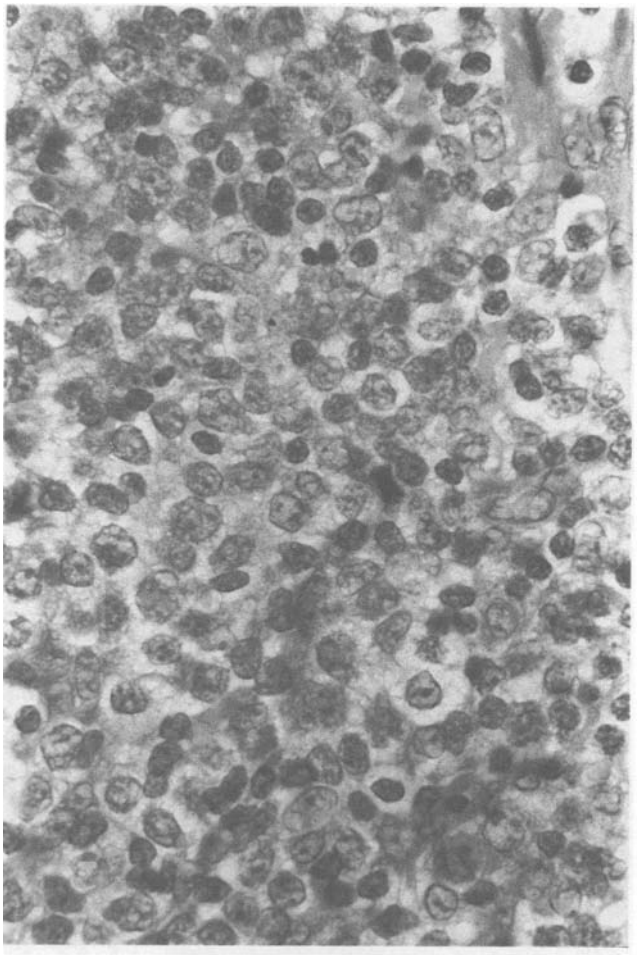

FIG. 2

High power view showing mainly centroblasts; confirmed on immunocytochemistry (H & E; × 400).

Discussion

Patients with NHL generally present with nodal involvement though up to 30 per cent of all NHL arises from extranodal sites (Freeman, 1972). The most common site for extranodal involvement in the head and neck is Waldeyer's ring and within this group of lymphoid tissue the tonsils are most commonly involved (Kong *et al.*, 1984). Other sites of extranodal involvement in decreasing order of incidence are: the nose and paranasal sinuses, the orbit, the parotid and remaining salivary glands, the pharynx and larynx (Kapadia, 1981).

NHL involving the superficial tissues of the head and neck is rare. Conley *et al.* (1987), described two cases of NHL presenting in the scalp among 287 head and neck patients seen over a period of ten years. Parekh (1993) described a rare case of NHL in the cranial vault while Peerless *et al.* (1977) described NHL involving the infratemporal fossa. To our knowledge, there have been no reported cases to date of NHL presenting as a temporal swelling.

The treatment of NHL can involve surgery, radiotherapy or chemotherapy as single modalities or in combination. The treatment goal is curative or palliative depending on the stage of the disease and the general health of the patient. The role of surgery is principally diagnostic but it is used in some cases as a curative measure. The treatment regimen depends on a number of factors including whether the histology is low, intermediate or high-grade and whether the disease is localized or systemic (Freeman *al.*, 1972; Conley *et al.*, 1987).

The patient discussed in this report had localized disease which was completely excised with no evidence of systemic spread. As such, no further treatment was given and she continues to be followed up with no evidence of recurrence at six months. NHL of the temporal region is extremely rare but should be considered in the differential diagnosis of a mass in this area. Surgical excision of superficial temporal lesions is straightforward with low morbidity and should be carried out in most cases.

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