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Case Report

Laryngeal giant cell tumour presenting as a tongue base lesion causing severe dysphagia

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الملخص

أورام الخلايا العملاقة هي آفات حميدة وغير مألوفة تظهر في الحنجرة. قد يصاب المريض بصعوبة في البلع، وبحة في الصوت وتورم في الجهة الأمامية من الرقبة. أورام الخلايا العملاقة هي نادرة للغاية، وهناك حالات قليلة في الأدبيات المنشورة. نعرض لحالة إمرأة مسنة قدمت بصعوبة شديدة في البلع، وورم في قاعدة اللسان. أظهرت نتيجة الورم بأنه ورم الخلايا العملاقة في الحنجرة وتم علاجه بنجاح باستخدام المعالجة الكيميائية.

الكلمات المفتاحية: أورام الخلايا العملاقة؛ الحنجرة؛ صعوبة البلع؛ دينوسوماب؛ المعالجة الكيميائية

Abstract

Giant cell tumours are benign lesions that are uncommonly found in the larynx. Patients with these tumours may present with dysphagia, hoarseness and anterior neck swelling. Giant cell tumours are extremely rare and only a few cases have been reported. We present a case of an elderly woman who presented with severe dysphagia and a mass at the base of her tongue. The mass was found to be a laryngeal giant cell tumour and was successfully treated with chemotherapy.

Keywords: Chemotherapy; Denosumab; Dysphagia; Giant cell tumour; Larynx

Introduction

A giant cell tumour (GCT) is a rare neoplasm of the larynx. Only 43 cases have been reported to date.[1] GCTs usually involve the long bones.[2–4] In the head and neck region, they affect the mandible, skull base, paranasal cavities or cervical spine.[5] GCTs in the larynx arise from the supporting laryngeal cartilages, and contribute to less than 2% of all primary laryngeal neoplasms.[2,4,6,7] Differential diagnoses include chondroblastoma, chondromas, osteoblastomas, giant cell reparative granulomas, brown tumours of

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hyperparathyroidism, aneurysm bone cysts, osteosarcomas, chondrosarcomas, and spindle cell or sarcomatoid carcinomas.[2]

Case report

A 63-year-old woman presented with a 3-month history of swelling in the right neck, which although painless, gradually increased in size. She also developed severe dysphagia and hoarseness. She presented no underlying medical problems, history of trauma, family history of malignancy, or exposure to radiation.

On examination, the swelling in the right neck measured 15 × 8 cm in size, and felt firm, but not tender. No other palpable lymph nodes were detected, and the patient's tonsils were neither enlarged nor medialised.

Flexible nasopharyngolaryngoscopy (FNPLS) revealed a non-fungating mass at the base of the tongue (Figure 1). It was localised towards the right side crossing the midline with obliteration of the vallecula. The lingual surface of the epiglottis was partially observed.

A computed tomography (CT) scan of the neck showed a large, lobulated, enhancing mass, likely arising from the right hyoid bone with extension to the contralateral side, with dimensions of 5.8 × 7 × 6.6 cm (Figure 2). The mass comprised multiple ring-and-arc calcifications and central necrosis. Superiorly, it extended to the base of the tongue with a poor plane at the right genioglossus and geniohyoid muscle. Inferiorly, it extended to just above the thyroid gland with a clear plane of demarcation. Medially, it caused narrowing of the larynx by more than 50% with poor demarcation of the vocal cord (Figure 3). Laterally and posteriorly, it displaced the right sternocleidomastoid muscle. A clear fat plane with the right submandibular and parotid gland was observed. CT scan findings suggested the presence of a malignant hyoid tumour.

She underwent an elective tracheostomy under local anaesthesia in anticipation of upper airway obstruction and biopsy of the tongue base lesion. Intraoperatively, a large mass involving the base of the tongue and the hypopharynx was noted, medially compressing the supraglottic and glottic regions and obscuring the airway.

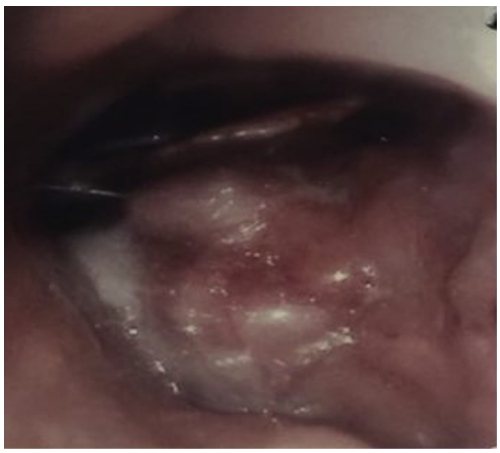

Figure 1: Flexible nasopharyngolaryngoscopy examination revealed an irregular-surfaced mass at the base of the tongue.

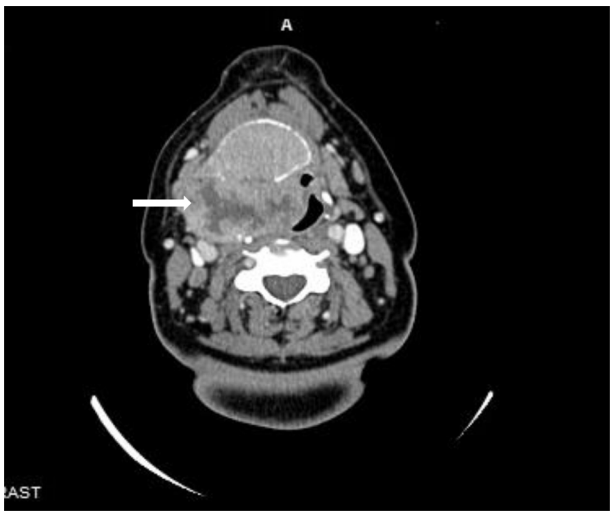

Figure 2: Computed tomography scan showed a large lobulated enhancing mass (white arrow) arising from the right hyoid bone with multiple ring-and-arc calcifications and central necrosis.

Histopathological examination showed that the tumour tissue was composed of mononuclear cells and osteoclast-like giant cells (Figure 4). These mononuclear cells comprised round-to-ovoid, often indented, vesicular nuclei and small nucleoli with pale eosinophilic or amphophilic cytoplasm. Mitotic activities were not observed. There were areas of haemorrhage with stromal collagenisation. Reactive new bone formation was observed (Figure 5). There was no overt evidence of malignancy.

The patient was diagnosed with a giant cell tumour of the larynx.

As the tumour was locally aggressive and surgical resection may have induced complications, such as functional disabilities of swallowing and speech, we opted for oncological treatment. Furthermore, the patient was not keen for

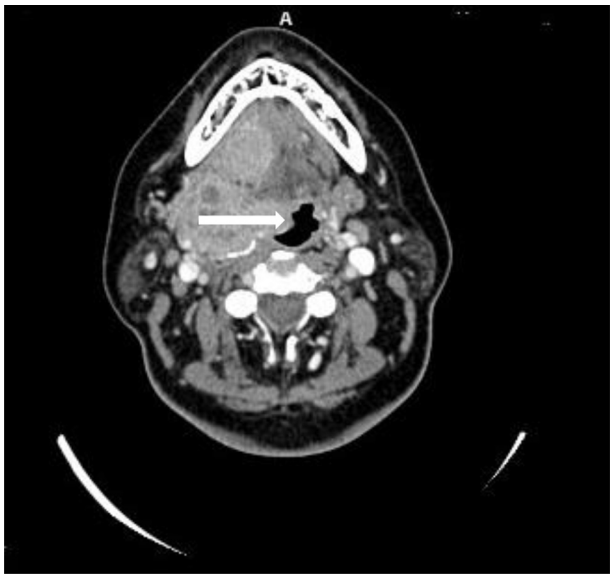

Figure 3: Computed tomography scan shows the mass extends to the base of tongue (white arrow), narrowing the larynx.

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