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Short communication

Glomangioma: rare case of a painful lump in the upper lip

A.R. Hamilton *, A. Paton, J.J. Downie

Oral and Maxillofacial Department, Forth Valley Royal Hospital, Stirling Road, Larbert, FK5 4WR, UK

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Abstract

Glomus tumours in the lip are extremely rare with only 13 cases, including this one, recorded in the English language that we know of. We report a 45-year-old woman with a firm, mildly painful lump in her upper lip. Excisional biopsy examination and histopathological analysis showed it to be a subtype of glomus tumour called a glomangioma.

Keywords: Glomus tumour; glomangioma; upper lip; lump; labial

Introduction

Glomus bodies are thermoregulatory organs that are situated in the dermis, the highest number of which are in the hands and feet.[1] They consist of an arteriovenous anastomosis called a Sucquet-Hoyer canal, surrounded by smooth muscle and glomus cells, and are encompassed by a capsule of connective tissue.[2] In rare instances, hyperplasia of the glomus body gives rise to benign neoplasms that are commonly referred to as glomus tumours. These are divided into three main subcategories; solid glomus tumours, glomangioma, and glomangiomyoma, depending on the degree of hyperplasia of the glomus cells, and the vascular or smooth muscle component, respectively.[3]

These tumours are rare in the oral cavity, with only 32 cases reported to our knowledge. Including this case, there are only 13 recorded labial glomus tumours, nine of which were in the upper lip and four in the lower.[4]

Case report

A 45-year-old woman was referred to the oral and maxillofacial department with a lump on her upper lip that had been present for several years with no change in size. She reported a short, sharp pain when drinking or on touch that was not linked to temperature. There had been no discharge, paraesthesia, or change in colour.

Past medical history included irritable bowel syndrome and depression, with no known allergies. She had used an e-cigarette since she had stopped smoking tobacco 14 years previously, before which she had smoked 40/day for 20 years.

Extraoral examination showed no lymphadenopathy and no visible swelling. Intraoral examination showed a firm, 5 mm swelling. which lay deep to the normal overlying mucosa in the midline of the upper lip, and was tender to palpation. There were no associated changes in colour.

The lesion was excised with a primary incision and blunt dissection under local anaesthetic. It was removed intact, and clinically had the appearance of a mucocoele.

Histopathological examination showed a piece of connective tissue within which there was a well circumscribed, encapsulated lesion composed of large vessels with dilated lumina that contained red blood cells. Surrounding this were

* Corresponding author. Present address: Oral Surgery Department, Edinburgh Dental Institute, Lauriston Place, Edinburgh, EH3 9HA, UK.
E-mail addresses: Alice.hamilton2@nhs.net (A.R. Hamilton), jeff.downie@nhs.net (J.J. Downie).

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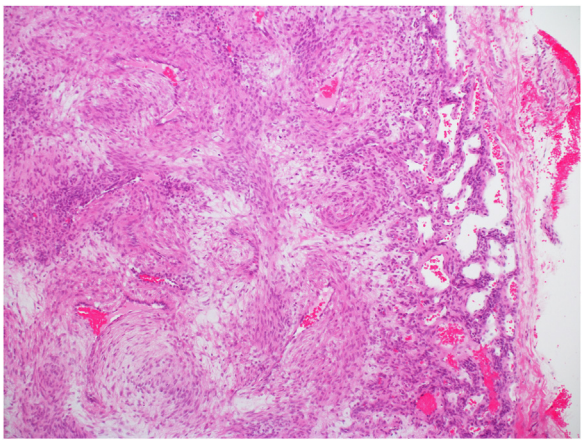

Fig. 1. A photomicrograph of the glomangioma (haematoxylin and eosin staining, original magnification x 100).

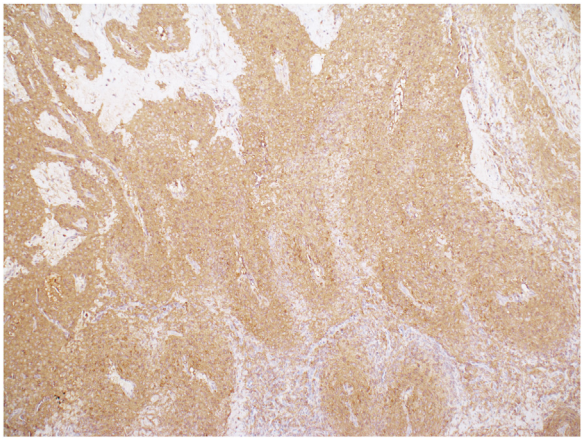

Fig. 2. A photomicrograph of the glomangioma (smooth muscle actin staining, original magnification x 100).

numerous cells with spindled and round nuclei that appeared bland without identifiable mitotic activity. The cells had a moderate amount of eosinophilic-staining cytoplasm. In areas there was secondary myxoid-type change (Fig. 1). Lesional cells stained for smooth muscle actin (Fig. 2), and the features were in keeping with a diagnosis of glomangioma.

Follow up at three months showed no signs of recurrence and the patient was discharged.

Discussion

Glomus tumours are rare, making up 1.6% of all soft tissue tumours found in the body.[5] They mainly present in subungual areas, but may occur in other sites throughout the skin, and even rarely in areas such as the stomach, lungs, and trachea.[6,7] Extraoral glomus tumours are typically red or blue subcutaneous nodules that present with a triad of symptoms: hypersensitivity to cold, stabbing pinpoint pain, and paroxysmal pain.[2] Only a third of patients with such lesions report pain, however. Including this case, only six labial tumours have presented with pain, which tended to be mild.[4]

Oral glomus tumours usually present in the third to fifth decade of life, with a mean presentation of 45 years and a wide range from 10 to 85 years.[4,8] Subungual glomus tumours appear to be more prevalent in women, whereas those in the lips have an almost equal distribution between both sexes.[5,4]Other intraoral sites include the palate (five cases), tongue (four), buccal mucosa (four), gingiva (three), oropharynx (one), pterygoid fossa (one) and the parotid (one).[1,4]

A lump in the lower lip is most commonly caused by a mucocoele, but in the upper lip it is more commonly a result of benign minor salivary gland neoplasms,[8] pleomorphic adenoma, or canalicular adenoma.[9] It is important to rule out more sinister causes such as mucoepidermoid carcinoma. Rare cases of malignancy arising from the glomus body are called glomangiosarcomas. To the best of our knowledge, until 2018 when one was reported on the tongue, there had been no cases of such a primary oral malignancy published.[10]

The incidence of glomangioma is difficult to ascertain. Many previous reports of such lesions come under the broad category of glomus tumours, and have a lack of thorough histological records on whether the they are a cellular solid type, vascular, or cellular with myxoid stroma, which would differentiate between solid glomus tumours, glomangioma, or glomangiomyoma. Of the reported cases, solid glomus tumours appear to be the most common (75%) and are considered to be true neoplasms.[1] There is debate as to whether glomangiomas or glomangiomyoma are true neoplasms or malformations of normal glomus bodies. Both glomangiomas and glomangiomyomas retain components of a normal glomus body, but have a haphazard arrangement of either the vascular or smooth muscle cell components, respectively.[3] They may have features from across these subcategories, which suggests that they may not be single entities, but rather sit within a histological spectrum.[1]

The rarity of oral glomus tumours means there are a lack of data on recurrence. The reported recurrence of extraoral glomus tumours is 2%–50%, but there have been no documented cases orally that we know of. The follow-up period, if recorded, varied from one month to seven years.[4] Recurrence seems to be low and can be managed by further excision.

Conflict of interest

We have no conflicts of interest.

Ethics statement/confirmation of patient's permission

No ethics approval was required. Written and verbal consent were given for this case report.

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