Case Report: A large leaf fibroma

Anna Maxwell and Nick Grey from the University of Manchester Dental Hospital discuss the diagnosis and treatment of large leaf fibromas

Leaf fibromas are pink, fibrous, pedunculated lesions that have been flattened against the palate by a denture. Treatment involves surgical excision followed by construction of a new, close-fitting denture. Leaf fibromas can be a source of anxiety for patients, even when they have been present for many years. The differential diagnosis can include giant cell lesions, phoenician granulomas and malignancy. Therefore it is essential that histopathological examination is carried out to confirm the diagnosis.

Introduction

Soft tissue pathologies associated with dentures include infections, reactions to the denture materials and mechanical injury. Chronic atrophic candidiasis, also known as denture stomatitis, is a common condition that affects the palatal mucosa of denture wearers. It is often caused by a candidal infection secondary to unsatisfactory dental hygiene and ill-fitting dentures. Xerostomia and some systemic conditions, including HIV (human immunodeficiency virus), will further predispose patients to candidiasis. Allergic reactions to denture material constituents do occur but is considered rare. The burning sensation perceived as an allergic reaction is more commonly caused by mechanical irritation. Traumatic ulcers in denture wearers can be caused by overextensions or uneven occlusal loading. This can be relieved by adjustments to the denture. It has been reported that chronic injury from dentures can predispose patients to oral carcinomas thus emphasising the importance of regular dental reviews for denture wearers.

Some systemic conditions, in particular, may cause overextensions or ulcerations in denture wearers. This can be caused by overextensions or ulcerations at the base of the epulis where it meets the denture. If the growth occurs as a result of irritation by the border of a denture, it is known as epulis fissuratum, granuloma fissuratum or denture-irritation hyperplasia. These lesions can vary in size and may be erythematous and ulcerated. When the fibrous epulis forms underneath the palate of the denture, it is known as a leaf fibroma.

Leaf fibromas are painless, pink and lobulated epulis flattened against the palate by a denture. They have a pedicle attachment to the underlying mucosa, which can be singular or multiple and are more common in women. Treatment is by conservative surgical removal and construction of new dentures. Long-standing leaf fibromas will have a well-developed blood supply and prior to surgical removal consideration should be given to haemostasis. Whilst altering the denture may decrease the size of the lesion, due to the dense nature of the scar tissue, adjustment alone will not cause complete regression.

Case Report

A 54 year old female patient was referred to the Department of Restorative Dentistry at the University of Manchester Dental Hospital by her General Dental Practitioner. She attended complaining of a “dangly bit” in her palate that had been present for approximately five years. The lesion was not painful but interfered with her upper complete denture which she had been wearing for approximately 15 years.

The patient’s medical history included depression, hypertension, hyperlipidaemia, arthritis, asthma and rhinitis. She was taking a polypharmacy of fluoxetine, felodipine, bendroflumethiazide, simvastatin, naproxen, salbutamol, beclometasone, loratidine, citalopram, omeprazole and prednisolone. She was taking a polypharmacy of fluoxetine, felodipine, bendroflumethiazide, simvastatin, naproxen, salbutamol, beclometasone, citalopram, omeprazole and prednisolone. She had hayfever, dust allergy and was allergic to septrin.

On examination there was a large, pink, pedunculated soft tissue lesion in the patient’s palate, as shown in Figure 1.

The lesion was excised and histopathological examination confirmed the clinical diagnosis of a leaf fibroma. A new set of dentures were subsequently constructed by the patient’s general dental practitioner.

Discussion

The histopathology of leaf fibromas includes dense irregular connective tissue fibres, covered by epithelium which is usually hyperplastic. Although classic in appearance, histopathology examination should be carried out to exclude giant cell lesions, phoenician granulomas and malignancy. A case has been reported in the literature of a patient who presented with a lesion resembling a leaf fibroma but on biopsy was shown to be a malignant melanoma. Primary intra oral malignant melanoma is rare but has a poor prognosis compared with presentation on the skin, thus illustrating the importance of confirming the diagnosis.

Small leaf fibromas could easily be missed and this case demonstrates how, if left for some time, they can increase in size and become a source of anxiety for patients. There are many presentations of intra oral malignancies, some with a benign appearance, thus a diagnosis of leaf fibroma should always be confirmed.