

## Case Series Oral lipomas: A report of two cases

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### ABSTRACT

**Background:** Lipomas of oral origin are rare unlike other parts of the body. When they are found in this region, it is essential to document the presentation and the management. **Aim:** To present two clinical cases of oral lipomas, and their surgical management. **Methods:** Two clinical cases of oral lipomas were used to illustrate the presentation and surgical management of lipomas. **Findings:** The first clinical case was a 70 year old woman with lipoma on the floor of the mouth. The second case was a 55 year old woman with lipoma on right buccal sulcus. Both had surgical excision of their lesions done under local anaesthesia and intravenous sedation. **Conclusion:** Oral lipomas could hamper the functions of the oral cavity. Therefore, it is imperative to surgically excise it as at presentation.

**Key words:** Lipoma, mouth, buccal mucosal, adipocytes, surgical excision, facial swelling

### INTRODUCTION

Lipomas are benign mesenchymal tumours of adipocytes.<sup>[1]</sup> They are common in human body but rare in the oral cavity.<sup>[1]</sup> They are frequently encountered in adults, and account for almost 5% of all soft tissue tumours.<sup>[2,3]</sup> Most of literature references<sup>[1-4]</sup> are mainly case reports. 13% of the lipomas arise in the head and neck region while the oral cavity incidence is 1.0% - 4.5% of all benign oral lesions.<sup>[2]</sup> They rarely present before the third decade of life and with slight gender predilection for males.<sup>[4]</sup> Most lipomas grow slowly and their exact aetiology is unknown but some implicated factors include trauma, infection, chronic irritation

and hormonal alterations.<sup>[3]</sup> The characteristic appearance is a smooth surfaced, yellowish pink mass covered by a readily vascular network.<sup>[4]</sup> Oral lipomas are usually painless, well circumscribed, slow growing, and usually located on the oral mucosal.<sup>[4]</sup>

When it affects the mouth, the common sites are: the buccal mucosa, lip and the floor of the mouth.<sup>[5]</sup> A case of lipoma in a 62 year old male which present on the right side of the floor of the mouth was reported.<sup>[6]</sup> Chidzonga et al<sup>[7]</sup> reported a case of gigantic tongue lipoma. Furlong et al<sup>[8]</sup> analyzed 125 lipomas of the maxillofacial region, and found out that the parotid region was the site

most prevalent, followed by the buccal mucosa, lip, submandibular region, tongue, palate, floor of the mouth and the buccal vestibule.

The present report is of two patients; a 70 year old female who presented with a lipoma on the right sublingual region of 5 years duration and a 55 year old female who presented with lipoma on the right buccal mucosa of 2 years duration.

## CASE REPORTS

### CASE ONE

A 70 year old woman reported to the Dental/Maxillofacial Surgery Unit of Barau Dikko Specialist Hospital, Kaduna with a large intra oral, painless, slow growing mass of five years duration. She complained of difficulty with swallowing, speech, mastication and occasionally respiratory distress. Examination revealed a bulging, sessile, smooth, yellowish swelling at the right sublingual region of the floor of the mouth. The swelling was about 6cm by 4cm in dimension, solitary, well circumscribed, soft and not attached to the underlying structure with no change and no ulceration on the overlying mucosal. The swelling was non tender and doughy in consistency with normal mucosa and overlying blood vessels (figure 1), extending into the region of the right sublingual duct. Full blood count results are within normal range and biochemical results showed serum electrolytes and ureas were within normal limits.

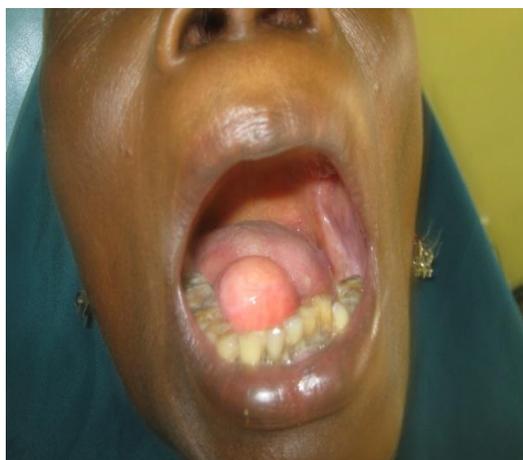


Figure 1: Tumour on the floor of the mouth

Under local anaesthesia and intravenous sedation, lesion was excised by the use of blunt and sharp careful dissection (figure 2). The incision site was closed primarily with 3/0 catgut suture. Macroscopically, the resected mass was yellowish in colour, smooth in surface and soft in consistency. Histopathology report showed keratinized stratified squamous epithelium with lobules of univacuolar mature adipocytes with uniform nuclei placed at the periphery and demonstrated a thin fibrous capsule. Small spindle cells accompanying capillaries located in the triangular confluence of the adipocytes (figure 3).



Figure 2: Excised tumour

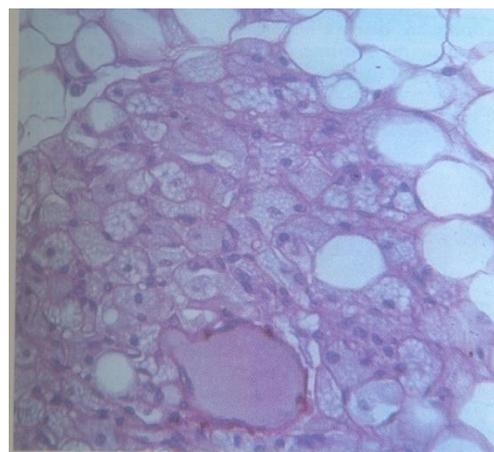


Figure 3: Photomicrograph of lipoma. PT stain. Medium magnification

## CASE TWO

A 55 year old female reported at the same clinic as case one with a large intra oral mass, which developed in the last 2 years. She claimed that similar tumour was removed from the same site about ten years ago. The lesion is slow growing, sessile, soft in consistency, well circumscribed and painless. The tumour was asymptomatic except for the obvious facial swelling which made her seek treatment. Extra oral examination revealed soft and diffuse swelling over the right side of the face with linear scar on the skin (figure 4). Intra oral examination revealed a mass in the right buccal sulcus measuring 7.5 x 3 cm adjacent to lower premolars and molar teeth. It was soft, sessile with no surface ulceration. The overlying mucosal was normal in colour and texture. Haematological result showed haematocrit 37% and biochemical results of serum electrolytes and urea were within normal range.



Figure 4: Tumour of the buccal mucosa

Under local anaesthesia and intravenous sedation, surgical excision of the tumour was done through an intra oral gingival incision (figure 5). The tumour was removed wholly. The incision site was closed with 3/0 catgut suture. Macroscopically, the tumour was diffuse, yellowish, smooth surfaced and soft in consistency. Histopathology report showed aggregates of adipose cells which was consistent with a diagnosis of lipoma.



Figure 5: Excised tumour of case two



Figure 6: Surgical site after excision

## DISCUSSION

Lipoma is a common benign mesenchymal tumour of adipose tissue, but its presence in the oral and oropharyngeal region is relatively uncommon with a prevalence of 1-5% of all the neoplasm.<sup>[5]</sup> The first description of an oral lipoma was by Raux in 1848 in his review of alveolar masses, which he described it as a yellow epulis.<sup>[9]</sup> In this report the excised lesions were slow growing, soft, doughy, and yellow color tissue (figure 2 and figure 5) and with normal overlying mucosa, which is consistent with previous reports.<sup>[5-8]</sup>

Dattilo *et al.* described an asymptomatic lipoma in the floor of the mouth in contrast to case one which was symptomatic with disturbance of speech, mastication and swallowing.<sup>[10]</sup> Ahmed *et al.* described a symptomatic lipoma on the right buccal

sulcus which affected mastication and speech in contrast to case two of this report which presented no symptoms.<sup>[11]</sup> Majority, remains unulcerated and present no diagnostic problems.<sup>[12]</sup> The average duration of the lipoma, before excision is 3.2 years with a range of 6 weeks to 15 years<sup>[12]</sup> and a size varying from 0.5 to 8 cm in diameter.<sup>[7]</sup> In our report, the duration of case one was of 5 years with a diameter of 6cm (figure 2), while case two has duration of 2 years with a diameter of 7.5 cm. The lesion may be pedunculated or sessile and occasional cases show bosselation.<sup>[13]</sup> The two cases presented were sessile and none showed bosselation.

Oral lipoma may occur in the major salivary glands, buccal mucosal, lips, tongue, palate, vestibule and floor of the mouth.<sup>[9]</sup> The most common anatomic site in the oral cavity is the buccal mucosa followed by the parotid region.<sup>[12]</sup> The case two occurred in the buccal mucosa while case one was in rare site, the floor of the mouth. Local recurrence of lipomas is rare with 5% recorded.<sup>[12]</sup> The case two reported was a recurrent tumour after eight years from the time of first surgery. Lipomas have a less more uniform appearance than the surrounding fibrovascular tissue when transilluminated.<sup>[14]</sup> Magnetic resonance imaging scans are very useful in the clinical diagnosis while CT scan and ultrasonography are very reliable.<sup>[14]</sup>

The differential diagnosis of lipomas of the floor of the mouth should include ranula, dermoid cyst, thyroglossal cyst, ectopic tissues, pleomorphic adenoma, fibrolipoma and angiolipoma while for buccal mucosa include: mucocele, pleomorphic adenoma, and neurofibroma. The histopathology remains the gold standard in the diagnosis of lipoma.<sup>[14]</sup> Lipomas are not very different in microscopic appearance from the surrounding fat. Like fat, they are composed of mature fat cells, but slightly vary in size and shape and are somewhat larger, measuring up to 2000mm in diameter.<sup>[14]</sup> Definitive diagnosis is usually by microscopic examination which shows lobules of mature adipocytes with uniform nuclei (figure 3).

Surgical excision is the main stay of treatment,<sup>[7-9]</sup> with a recurrence rate of 5%. Recurrence is reduced by wide surgical

excision with preservation of surrounding structures. Wide surgical excision of total tumour tissues was the treatment in these cases. The cases presented showed how big lipoma can grow if untreated.

## CONCLUSION

Based on the cases reported, oral lipomas are uncommon neoplasms in the oral cavity. Its diagnosis is confirmed by clinical and microscopic examination. The treatment is surgical excision. Oral lipomas must be excised surgically, and microscopic examination must be performed on the tissue to ascertain the clinical diagnosis.

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**Conflict of Interest:** None declared



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