

Documentation of Lipomas in the Oral Cavity of Two Institutes in Turkey

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ABSTRACT

Objective: About 20% of lipomas are seen in the head and neck region among which oral lipomas constitute only 1-4%. Our aim was to investigate oral lipomas from two institutes in Turkey.

Study design: Pathology material including reports and slides between 2007 and 2014 were retrieved.

Results: Eight cases of oral lipomas were detected emphasizing this rare entity.

Conclusion: Lipoma is one of the benign mesenchymal tumors which rarely occur in the oral mucosa. Intraoral lipoma should be kept in mind in the differential diagnosis of intraoral lesions.

Keywords: Benign, lipoma, oral, soft tissue

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INTRODUCTION

Lipoma is a rare benign mesenchymal tumour of the oral mucosa. Oral lipomas constitute only 1-4% of cases reported in the head and neck. They are slow growing, painless, asymptomatic submucosal masses which may cause speech, mastication and denture problems only in large sizes. Histopathologically, most oral lipomas are composed of mature fat cells with varying numbers of collagen fibers and supporting small blood vessels. Herein, we present eight cases of oral lipomas to emphasize this rare entity.

MATERIALS AND METHODS

Pathology material including reports and slides which were searched from 2007 to 2014 from two institutes were retrieved.

RESULTS

Eight cases were detected. The female-to-male ratio was 6:2 and the mean age of the patients was 60.2 years. The patients were referred to Ear-Nose-Throat and Head and Neck Surgery Departments due to intraoral masses. Physical examination revealed masses with a maximum diameter of 6 cm and a minimum diameter of 0.5 cm; two of which were located on the tongue, one under the tongue, two in the gingiva, one in the buccal mucosa and the last two on the palate. The masses were mobile. In cross-section they all appeared as lobulated yellow nodules. The histopathological evaluation revealed encapsulated lesions composed of mature adipocytes with clear cytoplasm separated into lobules by fibrous connective tissue (Fig 1, 2, 3). Cartilaginous tissue was noted within one of the masses (Fig 4).

DISCUSSION

Benign soft tissue neoplasms commonly occur in the oral cavity. Lipoma is one of the benign mesenchymal tumours which rarely occur in the oral mucosa. Twenty per cent of the cases are seen in the head and neck region of which 1-4% are located in the oral cavity (1, 2). Furlong *et al.* described 125 cases of oral lipomas in 20 years which demonstrates the infrequency of the masses in the oral cavity (3). The mean age was reported as 54.6 years by Freitas *et al* among the Brazilian population (4). In the current study, the mean age was 60.2 years. This type of tumour is predominantly seen in females (1). In our study, six patients were females and two were male. Among the oral lipomas, the most likely site is the oral mucosa. They also occur on the tongue, lips and floor of the mouth. The location depends on the amount of fatty tissue in the oral cavity (5, 6). There are very few cases reported as intraosseous lipomas in the mandible and ramus in the literature (7, 8). In our study, two cases were reported on the tongue, one under the tongue, two in the gingiva, two on the palate and one in the buccal mucosa.

The aetiology is still inconspicuous. However, in some cases, trauma and chronic irritation have been suggested causes in the development of the lipomas (9, 10). The clinical findings vary according to the location of the mass. The most common manifestation appears as a slow growing, painless, round, soft to firm mass in the submucosa (11). In the current study, all of the cases appeared as painless, round, submucosal lesions.

The lesions may differ in size from 0.2 to 1.5cm (12). Herein, they occurred as 0.5 to 6 cm masses in diameter.

Except if the colour of the lesion is yellow, it is difficult to reach the diagnosis clinically (13). The differential diagnoses of lipomas include dermoid cysts, ranulae, thyroglossal duct cysts, pleomorphic adenomas, oral lymphoepithelial cyst, benign salivary

gland tumours, mucocoele and benign mesenchymal neoplasms (2, 14). The diagnosis of lipomas relies on correlation between the clinical and histomorphological findings.

Histopathology is the gold standard in the diagnosis of lipomas. Histologically, the tumour is composed of mature fat cells that are separated into lobules by fibrous connective tissue. Based on microscopic features they are classified into classic lipoma, angiolipoma, spindle cell lipoma, sialolipoma, fibrolipoma, myxoid, and intramuscular lipomas (9). In this study, all of the cases occurred as classic lipomas with one of the cases containing cartilaginous tissue within the mass which was considered as a metaplasia.

Main treatment of the intraoral lipomas is simple surgical excision s took place in the current (12). Recurrence was not seen in any of the cases.

CONCLUSION

Intraoral lipoma is a rare entity which should be kept in mind in the differential diagnosis of intraoral lesions. Surgical excision is the preferred treatment option. Non-surgical treatment options are still under discussion which might be a part of the practice in the nearest future.

REFERENCES

1. de Visscher J G A M., Lipomas and fibrolipomas of the oral cavity. *J Maxillofac Surg* 1982; **10**: 177– 81.
2. Hatziotisn JC. Lipoma of the oral cavity. *Oral Surg Oral Med Oral Pathol Oral Radiol* 1971; **31**: 511–24.
3. Furlong M.A, Fanburg-Smith JC, Childers ELB. Lipoma of the oral and maxillofacial region: site and sub- classification of 125 cases. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2004; **98**: 441–50.
4. de Freitas MA, Freitas VS, de Lima AA, Pereira FB, dos Santos JN. Intraoral lipomas: a study of 26 cases in a Brazilian population. *Quintessence International* 2009; **40**: 79–85.
5. Lucas RB. Tumors of adipose tissue in pathology of tumors of the oral tissues. 4th edition. London: Churchill-Livingstone; 1984, 176–179.
6. Studart-Soares EC, Costa FW, Sousa FB, Alves AP, Osterne RL. Oral lipomas in a Brazilian population: a 10-year study and analysis of 450 cases reported in the literature *Med Oral Patol Oral Cir Bucal* 2010; **15**: e691–6, 2010.
7. Oringer MJ. Lipoma of the mandible. *Oral Surg Oral Med Oral Pathol* 1948; **1**: 12.
8. Johnson EC. Intraosseous lipoma: report of case. *J Oral Surg* 1969; **27**: 868–70.
9. Fregnani ER, Pires FR, Falzoni R, Lopes MA, Vargas PA. Lipomas of the oral cavity: clinical findings, histological classification and proliferative activity of 46 cases. *Int J Oral Maxillofac Surg* 2003; **32**: 49–53.
10. Aust MC, Spies M, Kall S, Gohritz A, Boorboor P, Kolokythas P et al. Lipomas after blunt soft tissue trauma: are they real? *Analysis of 31 cases. Br J Dermatol* 2007; **157**: 92–9.

11. Kaur RP, Kler S, Bhullar A. Intra-oral lipomas: report of three cases. *Dent Res J* 2011; **8**: 48–51.
12. Surej Kumar LK, Kurien NM, Raghavan VB, Varun MP, Khalam SA. Intraoral lipoma: a case report. *Case Rep Med* 2014; **30**: 480130.
13. Debnath SC, Saikia A. Lipoma of the parotid gland extending from the superficial to the deep lobe: a rarity. *Br J Oral Maxillofac Surg* 2010; **48**: 203-4. doi: 10.1016/j.bjoms.2009.
14. Longo F, Maremonti P, Mangone GM, De Maria G, Califano L. Midline (dermoid) cysts of the floor of the mouth: report of 16 cases and review of surgical techniques. *Plast Reconstr Surg* 2003; **112**: 1560–5.