Case Report

Adenomatoid hyperplasia of lower lip

Gaganjot Kaur Sharma1, Manish Sharma1, Srinivas S. Vanaki2

1Department of Oral and Maxillofacial Pathology, Guru Nanak Dev Dental College, Sunam, Punjab, 2Department of Oral and Maxillofacial Pathology, PMNM Dental College, Bagalkot, Karnataka, India

ABSTRACT

Adenomatoid hyperplasia (AH) is an uncommon, non-neoplastic swelling on the palate caused due to hyperplasia of the mucinous acini. The lesion clinically presents as a sessile tumor-like nodule resembling pleomorphic adenoma. Histopathologic findings include lobules of enlarged mucinous acini which are filled with secretory granules. The nuclei are squeezed to the basal portions, associated with focal inflammation and ductal dilatation, and a history of trauma is often elicited. Here, we report a rare case of AH of the lower lip in a 20-year-old male patient, which mimics a mucous retention cyst or mucocele.

Key Words: Adenomatoid hyperplasia, minor salivary glands, mucocele

INTRODUCTION

Adenomatoid hyperplasia (AH) is a non-neoplastic enlargement of minor salivary glands. This unusual entity was not well delineated in the literature until described by Giansanti et al in 1971.[1] Clinically, the lesion presents as an asymptomatic, firm, sessile and nontender, nodular mass that is not ulcerated.[2,3] Very few cases of AH have been reported in the literature and most of them were reported to be located in the palate, with a frequency of 67 out of 72 cases as reported by Giansanti (2 cases), Arafat (10 cases), Buchner et al (40 cases) and Barret et al (20 cases).[3-6] Other sites like buccal mucosa, upper lip, retromolar region and lower lip were also found to be affected. Previously, the lesion had been reported as benign minor salivary gland hypertrophy, salivary glandular hyperplasia, adenomatous hyperplasia of minor salivary glands and AH.[7] The condition has been regarded as idiopathic, but the role of chronic trauma has been suggested. It is not associated with factors causing major salivary gland enlargement. The purpose of this report is to present a case of AH of lower lip mucosa and to familiarize the clinicians with this uncommon pathology of minor salivary glands, which should be differentiated from other non-neoplastic (mucocele) and neoplastic lesions (adenoma) of minor salivary glands.

CASE REPORT

A 20-year-old male patient presented to P. M. Nadagouda Memorial Dental College with the chief complaint of painless soft tissue swelling in the lower lip [Figure 1]. The history of present illness consisted of the development of a swelling on the lower lip 6 months ago, which had gradually increased to the present size of 2 cm. The patient gave a history of associated trauma at the same region 1 year ago. On clinical examination, a well-circumscribed, single, oval, sessile, soft to firm and nontender swelling was observed on the left side of labial mucosa of lower lip. There was no associated pain and paraesthesia and the color of the overlying mucosa was normal. The clinical diagnosis of mucocele was rendered. The treatment plan consisted of the surgical removal of the lesion by placing a vertical incision, then splitting the overlying mucosa and resecting the lesion from the base to decrease the chances of reoccurrence.
Sutures were placed and the excised lesion was sent for histopathologic examination. The differential diagnoses included lymphangioma, hemangioma, AH, benign lymphoepithelial lesion and minor salivary gland neoplasms.

At low power of OLYMPUS CX41 light microscope, hematoxylin and eosin stained tissue section of 5 μm thickness showed two large, well-circumscribed lobules of normal appearing mucinous acini and ducts with intervening connective tissue septae [Figures 2 and 3]. Mucinous acini were larger than normal and distended. The filled mucin showed a bubbly appearance. Myoepithelial cells surrounding the acini were also evident. No dysplastic features were observed. Mild chronic inflammatory infiltration was also noticed which consisted of plasma cells and lymphocytes primarily. Mucicarmine stained histopathologic section of the lesion showed distended mucinous acini filled with mucin [Figure 4]. Mucicarmine stain helps in precise localization of accumulated intracellular and extracellular mucin content. The lesion healed without any complication, and the patient was recalled after 6 months and checked for recurrence of the lesion.

**DISCUSSION**

AH is an uncommon lesion of minor salivary glands. The lesion has a predilection for the palatal region and predisposition for males. The average age of onset is reported to be 39 years in the previous series, but Buchner et al reported a range of 7–79 years for
Sharma GK, Sharma M, Vanaki SS. Myoepithelial cells were located peripheral as it was not present in our case where Clinically, the lesion appears to All aforementioned Mucin spillage was not seen in any Misinterpretation neoplastic swellings of major salivary gland include endocrine disturbances, nutritional deficiencies, drugs and neuropathies; none of these seems to involve in the minor salivary glands enlargement. Buchner et al. suggested a probable role of chronic irritations like local trauma, smoking and prosthesis in this reactive hyperplasia. Our case also had a history of trauma to the lower lip. The lesion is unlikely to be described as hamartoma as it develops in people in their 30s.

CONCLUSION

AH of lower lip is a rare entity and should be considered in the differential diagnosis of mucocele and other non-neoplastic and neoplastic lesions of minor salivary glands. The consideration of chronic trauma in the etiology of this entity may be appealing as histology marked the reactive hyperplasia of minor salivary gland.

REFERENCES

1. Giansanti JS, Waldron CA. Intraoral mucinoid minor salivary gland lesions presenting clinically as tumors. Oral Surg Oral Med Oral Pathol 1971;32:918-22.
2. Devildos LR, Langlois CC. Minor salivary gland lesion presenting clinically as tumor. Oral Surg Oral Med Oral Pathol 1976;41:657-9.
3. Ellis GL, Auclair PL, Gnepp DR. Surgical pathology of the salivary glands. Philadelphia: Saunders; 1991. p. 18-21.
4. Arafat A, Brannon RB, Ellis GL. Adenomatoid hyperplasia of mucous salivary glands. Oral Surg Oral Med Oral Pathol 1981;52:51-5.
5. Barret AW, Speight PM. Adenomatoid hyperplasia of oral minor salivary glands. Oral Surg Oral Med Oral Pathol 1991;71:583-7.
6. Barret AW, Speight PM. Adenomatoid hyperplasia of oral minor salivary glands. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1995;79:482-7.
7. Petri WH, Carr RF, Khan CS. Adenomatoid hyperplasia of the palate. J Oral Maxillofac Surg 1992;51:310-1.
8. Bhavna G, Rajesh A, Sudha P, Mohit G. Mucocele: Two case reports. J Oral Health Commun Dent 2007;1:56-8.

How to cite this article: Sharma GK, Sharma M, Vanaki SS. Adenomatoid hyperplasia of lower lip. Dent Res J 2011;8:226-8.

Source of Support: Nil, Conflict of Interest: None declared.