Fibrolipoma of the Hard Palate: A Case Report

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**ABSTRACT** 

Lipoma is the most common benign mesenchymal tumor that occurs in the human body.

However, it is uncommon to occur in the oral cavity. According to literature, oral lipomas

most commonly affect the buccal mucosa, followed by the tongue, and the floor of the mouth.

On the other hand, lipomas rarely occur to the hard palate. We report a case of fibrolipoma

affecting the hard palate in this article. An intraoral excision of the tumor was performed

under general analgesia. The patient recovered well and was satisfied with the treatment

outcome.

**Keywords:** Fibrolipoma, hard palate, lipoma, oral cavity

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1

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## INTRODUCTION

Lipomas are common benign mesenchymal neoplasms comprised of mature adipocytes. They can be found in any part of body, especially the trunk and upper extremities. Although approximately 15 to 20% of lipomas occur in the head and neck region, only 1-4% of the cases are found in the oral cavity (1). The etiology of oral lipoma is not yet clear, and trauma, infection, chronic irritation and hormone are suspected to be contributing factors. This article reports a 56-year-old woman with fibrolipoma of hard palate, with slow growing and painless palpable mass over the palate as the presenting symptom.

## **CASE REPORT**

The subject was a 56-year-old woman who had been relatively healthy, without remarkable systemic disease in the past and no known family disease history. She came to our otolaryngology outpatient clinic to seek treatment of a slow-progressive and painless palpable mass that has been present at the palate for 7 years. She confirmed the absence of sore throat, toothache, dysphagia, weight loss and fever. She had history of habitual cigarette smoking about 1 package per day for 10 years.

Our initial intraoral examination indicated one palpable 3.0 x 3.0 x 1.5 cm pedunculated mass without focal tenderness over hard palate. Additional examinations on nose, ears, pharynx, larynx, and neck were returned with results within normal limits. The magnetic resonance imaging (MRI) exhibited the tumor located over the hard palate presenting hyperintensity on T1-weighted images and isointensity on T2- weighted images (Figure 1).

An intraoral excision of the tumor was performed under general analysis (Figure 2). The incision was made through the base of the pedunculated mass that was attached to the hard palate. She went through the operation smoothly with no immediate complication.

On gross examination, the excised tumor was a yellowish lump measuring about 3.0 x 3.0 x 1.5 cm in size. Microscopic examination revealed numerous lobules of mature adipocytes and outstanding bundles of fibrous tissue without cellular atypia (Figure 3). The pathology was compatible with a fibrolipoma.

The patient then received timely follow-up care at our otolaryngology outpatient clinic for one year. The wound of the hard palate healed uneventfully well with no evidence of recurrence. She was satisfied with the treatment outcome.

## **DISCUSSION**

Lipomas are the most common benign mesenchymal neoplasms occurring in the trunk and upper extremities. Around 1- 4% reported cases affected the oral cavity. The oral lipoma is often discovered in adults with the peak incidence in the fourth decade and beyond. Epidemiological analysis showed the incidence was similar between men and women (2). Oral lipomas are soft, well-circumscribed and slow growing tumors that develop for several years (3). According to the histopathological features, oral lipomas are categorized into simple lipomas, fibrolipomas, angiolipomas, myxoid lipomas, spindle cell lipomas, infiltrating lipomas, and salivary gland lipomas. For example, lipomas composed of mature fat cells separated by dense fibrous connective tissues were fibrolipomas. The most common location to find oral lipoma is the buccal mucosa, followed by the tongue, and the floor of the mouth. On the other hand, lipomas rarely occur in the hard palate (4). The patients usually are

asymptomatic unless the lipomas become large enough to affect mastication or speaking.

The differential diagnosis of an intraoral mass includes benign oral cavity lesions such as pleomorphic adenoma, ectopic thyroid tissue, thyroglossal duct cyst, dermoid cyst, lymphoepithelial cyst, and malignant tumors including mucoepidermoid carcinoma, liposarcoma to name a few (5). Compared with other histopathological variants of lipomas, fibrolipoma has a greater proliferative rate. The tumor sizes are rarely found to be less than 2.5 cm in diameter (6). In this case, the tumor was 3.0 x 3.0 x 1.5 cm in size.

A computed tomography (CT) or MRI examination is important to exclude bony erosion or any other malignancies in consideration. The lipomas were low radiodensity masses in CT examination. Furthermore, the lipomas were presented as hyperintensity on T1-weighted images and isointensity on T2- weighted images in MRI (7).

To our knowledge, the fibrolipoma has not been reported to occur in the hard palate in the literature. The etiology of fibrolipoma remains unclear. Maturation of the lipoblastomatosis resulting in fibrolipomation has been implied (8). Trauma, infection, chronic irritation, and hormone were reported as the contributing factors for the development of fibrolipoma (9).

Surgical removal is the preferable treatment for oral fibrolipoma. The surgical timing was not clearly advised and discussed in the previous literature. Generally the intraoral excision is considered if the tumor interferes with speech, mastication, or continuous

enlargement that the malignancy cannot be completely ruled out. Total excision reduces the recurrence after tumor removal (10).

In summary, fibrolipoma is an uncommon tumor in the oral cavity. The clinical presentation of oral lipoma is usually asymptomatic unless it becomes large enough to affect mastication or speaking. It should be included in the differential diagnosis of an intraoral tumor for otolaryngologists or dentists. CT and MRI are helpful assessment tools. Intraoral excisional surgery is the preferred treatment and the patients can have good recovery with low recurrence.

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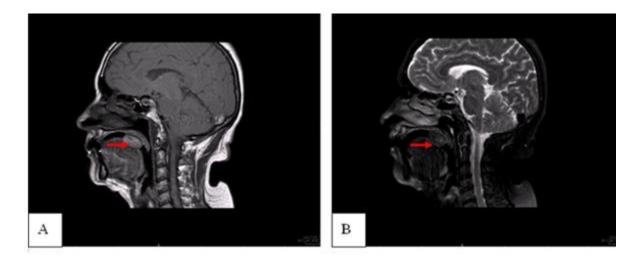


Fig.1: The magnetic resonance imaging exhibited the tumor located over the hard palate presenting hyperintensity on T1-weighted images (A) and isointensity on T2- weighted images (B). The tumor was marked with red arrow.

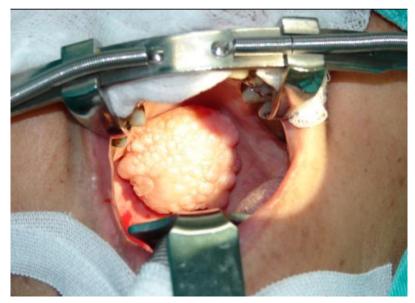


Fig. 2: One palpable 3.0x3.0x1.5 cm mass without focal tenderness was found over the hard palate. An intraoral excision of the tumor was performed under general analysis.

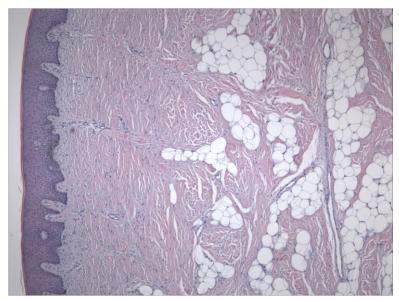


Fig.3: Histopathology demonstrating numerous lobules of mature adipocytes and outstanding bundles of fibrous tissue without cellular atypia. (Hematoxylin and eosin stain x 40)