

Oral Lipoma: A Case Report

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ABSTRACT

Lipomas are the most frequent benign neoplasms of mesenchymal origin, and they mostly occur in various anatomical sites, including the palate, lip, buccal mucosa and vestibule, tongue, and floor of the mouth. Lipomas have a low incidence between 1 to 4% of benign oral cavity lesions. The clinical presentation of lipomas is generally characterized as a neoformation with well-demarcated borders. In this clinical case report, a 66-year-old female patient presented with pain and an inflamed region in the oral cavity. In intraoral clinical examination, a neoformation of 1 centimeter in diameter was observed and located in the jugal mucosa of the right side of the oral cavity. Furthermore, an excisional biopsy was chosen as the treatment method, and a postoperative histopathological study was conducted. Surgical excision is the treatment of choice for preventing recurrence in patients with oral lipomas.

Keywords: adipose tissue, conventional lipoma, oral lipoma, oral mouth.

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I. INTRODUCTION

Lipomas are the most frequent benign neoplasms of mesenchymal origin; these neoplasms are formed by mature fatty tissue consisting of adipocytes that are commonly located in the subcutaneous and retroperitoneal spaces. Lipomas have demonstrated low recurrence in the mouth; however, when lipomas occur in the oral cavity, they most commonly appear in various anatomical sites, including the palate, lip, the buccal mucosa and vestibule, the tongue, and the floor of the mouth [1]. Lipomas have a low incidence of between 1-4% of benign oral cavity lesions. Furthermore, oral lipomas account for 2.2% of all lipomas occurring in the human body [2]. In 1848, soft tissue lipoma was first described as a yellowish epulis by Roux [3].

According to its etiology, various studies have highlighted mechanical factors as the possible cause of inflammation, trauma, and chronic irritation, which have been identified as contributing factors to the development of oral lipomas; however, its etiology has not yet been elucidated [3]. The clinical presentation of lipomas is generally characterized as a neoformation with well-demarcated borders, which is yellow in color or similar in color to the adjacent mucosa, asymptomatic, isolated, and slow growing [4]. The differential diagnosis may vary according to the location and depth of the lesion and often mimics the appearance of

developmental cysts, mucosal extravasation cysts, and salivary gland lesions [5].

Histologically, lipomas can be classified as classical lipomas or as one of the following variants: fibrolipomas, fusiform lipomas, pleomorphic lipomas, myxoid, intramuscular, angiolipomas, atypical lipomas, or salivary glands [6].

Conventional lipomas are composed of mature adipocytes, each with its nucleus located along the peripheral border, all of similar size and arranged in lobules that are separated from each other by the septa of mature fibroconnective tissue [7]. The treatment of lipomas consists of total surgical removal followed by histopathological study of the extracted lipoma(s) [8].

II. CASE PRESENTATION

A. Patient Information

A 66-year-old female patient presented to the diagnostic dental school clinic of The Intercontinental University with pain and an inflamed region in the oral cavity. Regarding the patient's history, the patient was identified as being treated for ongoing hypertension and hypothyroidism with a history of having suffered from thyroid carcinoma. All blood laboratory test values were within the normal range. Upon intraoral

clinical examination, a neoformation of 1 centimeter (cm) in diameter with a smooth surface and yellow appearance was observed.

The surrounding tissue of the lesion was similar in color to the adjacent mucosa and had a smooth surface and a sessile base, which was located in the jugal mucosa of the right side of the oral cavity (Fig. 1).

An excisional biopsy was performed with local anesthesia of the inferior dental nerve. Following excision, local stitches were used to suture the site closed. An incision was made with a #15 scalpel, and a larger neoformation of 1.8 cm was observed (Fig. 2).

The biopsy was dissected with scissors and placed in a 10% solution of formalin to perform the histopathological study (Fig. 3). To finish the procedure, it was sutured with Silk 4-0, and hemostasis was performed.



Fig. 1. This image shows a yellow neoformation, with areas similar to the adjacent mucosa located in the posterior jugal mucosa of the occlusion zone located on the anatomical right side of the oral cavity.

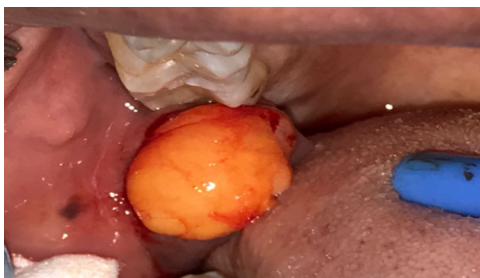


Figure 2: Photo showing the neoformation after incision. The neoformation as seen in the photo was yellow, lobulated, and located in the jugal mucosa.

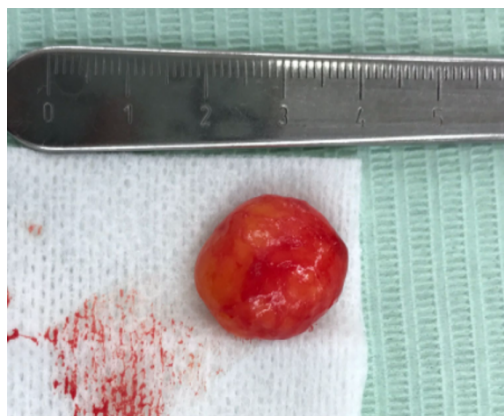


Figure 3: The picture shows the excisional biopsy specimen as an encapsulated lesion.

B. Histopathology Study

The histopathological study showed tissue stained with hematoxylin and eosin (H&E), showing lobules formed by

mature adipocytes, with each mature adipocyte being surrounded by a fibroconnective tissue capsule (Fig. 4). The final histopathologic report coincides with a conventional lipoma. The patient presented at their two-week follow-up showing signs of adequate recovery without bleeding, inflammation, and infection, and no recurrence of the lesion was observed.

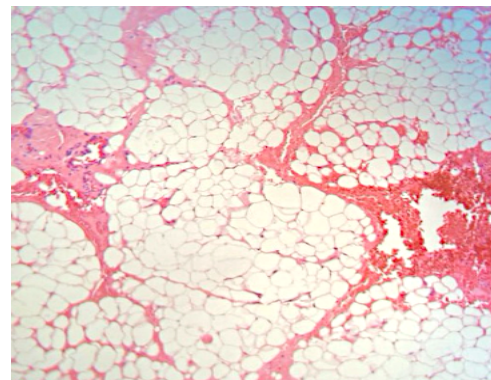


Figure 4: This histological image shows lobules of adipose tissue separated by mature fibroconnective tissue septa with scarce hemorrhage (10x).

III. DISCUSSION

Oral lipoma is a benign tumor of mesenchymal origin that can appear in any area of the body; however, it occurs with a prevalence of between 15 and 20% in the head and neck region, including the 1-4% that affects the oral cavity [1].

The diagnosis of lipomas in the oral cavity is most often made in adult patients between the ages of 60-80 years old. Furthermore, in such cases, no sex predilection has occurred. The results of this clinical case study coincide with those reported in the literature regarding age and sex [9], [10]. The regions in which oral lipomas occur, in descending order, are as follows: 1) jugal mucosa at a prevalence of 31 to 66%, 2) the tongue at a prevalence of 10 to 31%, 3) the lower lip at a prevalence of 8 to 21%, and 4) the floor of mouth at a prevalence of 5 to 22% [11]. The lesion presented in this clinical case was located in the jugal mucosa, thus coinciding with the most prevalent location of oral lipomas in the oral cavity.

Patients typically present with a lesion of at least 2.0 cm in diameter [12]. However, lesions measuring between 8.0 and 11 cm in diameter have been reported [13]. In [14] a patient with an oral lipoma of the jugal mucosa presented with a lesion 10 cm in diameter. The lipoma reported in this clinical case study was 1.8 cm in diameter, which is consistent with the published literature.

Lipomas are described by a proliferation of mature adipocytes with different amounts of connective tissue, which consists of bundles of collagen fibers and blood vessels [15]. Each lipoma is generally encompassed by a fibrous capsule, permitting an increase in adipocytes to be observed with a well-defined border [16].

Lipomas of the oral cavity alter the function and appearance of the patient's oral cavity. As such, they are diagnosed through clinical observation, and the diagnosis is then further confirmed by biopsy. To prevent recurrence, surgical removal and wide excisional biopsy must be performed with great care for the margin of healthy tissue.

Clinically speaking, no difference in the prognosis of the main histopathological variants of lipomas has been observed [17].

IV. CONCLUSION

Lipomas of the oral cavity are tumors that have a low rate of incidence and vary in both appearances as per clinical observation and histopathology. Conservative surgical excision is the treatment of choice for preventing recurrence and ensuring a long-term favorable prognosis of patients with oral lipomas.

CONFLICT OF INTEREST

The authors declare that they do not have any conflicts of interest.

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