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Bilateral fibrolipomas at both lower retromolar pads — case report



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Lipomas rarely arise in the oral cavity. Oral fibrolipoma is a histological variant of lipoma that mainly affects the buccal mucosa and the tongue.¹ Previously, we reported a spindle cell lipoma at the tongue and a fibrolipoma at the left buccal mucosa.^{2,3} The spindle cell lipoma or fibrolipoma we reported is a solitary tumor. Here, we presented bilateral fibrolipomas at both lower retromolar pads of a 53-year-old female patient.

This 53-year-old female patient came to a private dental clinic for treatment of two soft tissue masses at the bilateral lower retromolar pads. The two soft tissue tumors were often irritated by the bilateral maxillary third molars and this caused pain and inflammation at the bilateral lower retromolar pad areas. Thus, the patient wanted to solve this problem. Intraoral examination revealed two pink, elastic, and protruding masses measuring approximately $0.8 \times 0.5 \times 0.4$ cm for the right side tumor and $0.9 \times 0.6 \times 0.5$ for the left side tumor. These two tumors were covered by intact oral mucosa. Because these two tumors were pink and elastic, the clinical diagnoses were both fibromas. After discussing with the patient and obtaining the signed informed consent, the two tumors were excised under local anesthesia and the tissue specimens were sent for histopathological examination. Microscopically, both tumors were similar and showed lobules of mature adipocytes in the central portion and well vascularized fibrous connective tissues at the peripheral portion of the lesions (Fig. 1A1,B1). At high-power view, the fibrous connective tissues were composed of thin and coarse collagen bundles and capillaries or medium-sized blood vessels (Fig. 1A2,B2) and the fatty tissues contained lobules of various-sized mature adipocytes with empty and clear cytoplasm and nuclei lying against the cell membrane (Fig. 1A3,B3). Therefore, bilateral fibrolipomas were finally diagnosed. The patient's postoperative course was uneventful. No recurrence of the lesions was observed after a follow-up period of 3 months.

Lipoma is a benign mesenchymal neoplasm. Several histological variants of lipoma have been described, such as the simple lipoma, fibrolipoma, angiolipoma, intramuscular lipoma, and spindle cell/pleomorphic lipoma.¹⁻³ The spindle cell lipoma is a very specific type of lipoma and shows spindle cells arranged in a loose and myxoid stroma interspersed by mature adipocytes of varying sizes. It usually needs immunostain to confirm the diagnosis, because the spindle cells are positive for CD34 and vimentin and mature adipocytes are positive for S-100.^{1,2} The fibrolipoma is the second most common variant of oral lipoma and is characterized by a prominent fibrous component intermixed with the lobules of adipocytes.^{1,3} The fibrolipoma does not need immunochemistry to identify the cell types or origin of the tumor cells.³⁻⁵ Oral fibrolipoma is often solitary and bilateral presence of two fibrolipomas at both the lower retromolar pad areas is a rare occasion. We suggest that the increased fibrous tissues at the peripheral areas of the tumors are the results of chronic irritation caused by the two maxillary third molars. The recurrence of oral fibrolipoma is rare after conservative local excision.¹

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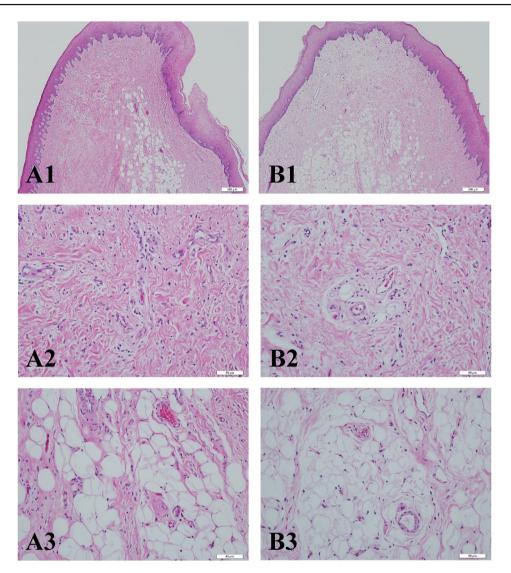


Figure 1 Histopathological microphotographs of the two oral fibrolipomas at the right (A1, A2 and A 3) and left (B1, B2 and B3) lower retromolar pads. (A1 and B1) Low-power microphotographs of the two fibrolipomas. Both tumors were similar and showed lobules of mature adipocytes at the central part and well-vascularized fibrous connective tissues at the peripheral part of the lesions. (A2 and B2) High-power microphotographs of the two fibrolipomas. Both peripheral fibrous connective tissues were composed of thin and coarse collagen bundles and capillaries or medium-sized blood vessels. (A3 and B3) High-power microphotographs of the two fibrolipomas. So the two fibrolipomas. Both central fatty tissues contained lobules of various-sized mature adipocytes with empty and clear cytoplasm and nuclei lying against the cell membrane. (Hematoxylin and eosin stain; original magnification; A1 and B1, $4\times$; A2, B2, A3, and B3, $20\times$).

Declaration of Competing Interest

The authors have no conflicts of interest relevant to this article.

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