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Oral fibrolipoma – Case report



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The fibrolipoma is regarded as a histological variant of the lipoma. Although lipomas are common mesenchymal neoplasms on the trunk and extremities, few cases of oral lipoma or its variants have been reported.^{1,2} Here, we presented a case of oral fibrolipoma at the left buccal mucosa of a 43-year-old female patient.

This 43-year-old female patient came to the dental department of our hospital for treatment of a soft tissue mass at the left buccal mucosa. The soft tissue tumor was asymptomatic and present for 6 years. Intraoral examination revealed a yellowish, soft, and protruding mass measuring approximately 2 cm in diameter with intact mucosal surface at the left buccal mucosa (Fig. 1A). Because the soft tissue tumor had a yellowish hue and was slightly fluctuated, the clinical diagnosis was a lipoma. The patient was referred to oral surgeon for total removal of the tumor. Then, the tumor was excised under local anesthesia and the specimen was sent for histopathological examination. Microscopically, it showed a nodular lesion containing lobules of mature adipocytes dispersed in a dense collagenous fibrous stroma (Fig. 1B, C and D). At high-power view, the mature adipocytes had varying sizes, empty and clear cytoplasm, and their nuclei lying against the cell membrane (Fig. 1E and F). Therefore, a fibrolipoma was finally diagnosed. The patient was uneventful after the operation. No recurrence of the lesion was noted after a follow-up period of 8 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.^{1,2} The simple lipoma is the most common type of oral lipoma which is composed of lobules of mature adipocytes surrounded by a thin fibrous capsule.¹ 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 The angiolipomas consist of an admixture of mature fat cells and many small blood vessels. The intramuscular lipomas have an infiltrative growth pattern exhibiting fat cells among skeletal muscle bundles. The spindle cell/pleomorphic lipomas present identical cytogenetic features, representing different histological spectrum of a single disease.¹ The spindle cell/pleomorphic lipomas show spindle cells arranged in a loose and myxoid stroma interspersed by mature adipocytes of varying sizes. Immunohistochemical analyses of these lipomas reveal that the spindle cells are positive for CD34 and vimentin, and negative for S-100 protein and muscle-specific actin. Mature adipocytes are positive for S-100, and less than 1% of the tumor cells are positive for Ki-67.^{1,2} Unlike the

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Figure 1 Clinical and histopathological photographs of our case of oral fibrolipoma. (A) A yellowish, soft, and protruding fibrolipoma with intact mucosal surface at the left posterior buccal mucosa. (B, C and D) Microphotographs exhibiting a nodular lesion containing lobules of mature adipocytes dispersed in a dense collagenous fibrous stroma (Hematoxylin and eosin stain; original magnification; B, $2 \times$, C, $4 \times$ and D, $10 \times$). (E and F) High-power view demonstrating the various-sized mature adipocytes with empty and clear cytoplasm and their nuclei lying against the cell membrane (Hematoxylin and eosin stain; original magnification; E and F, $20 \times$).

spindle cell/pleomorphic lipomas, the fibrolipoma does not need immunochemistry to identify the cell types or origin of the tumor cells.^{3–5} The oral fibrolipomas frequently occur at the buccal mucosa. The recurrence is rare after conservative local excision.¹

Declaration of Competing Interest

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

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