Case Report

Fibrolipoma of the tongue; a case report with literature review

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\section*{ABSTRACT}

\textbf{Introduction:} Fibrolipoma is a less frequent variant of lipoma, it is rarely reported in the oral cavity, especially in the tongue. This study aims to report a very rare case of tongue fibrolipoma.

\textbf{Case report:} A 53-year-old female presented with a painless mass at the anterior part of the tongue. It was soft with a smooth regular border. The patient underwent wide local excision to remove the lesion, and the sample was sent for histopathological examination which confirmed the diagnosis of a single fibrolipoma.

\textbf{Discussion:} Fibrolipoma is rare in the oral cavity, however, they have been seen in the buccal mucosa, lips, buccal vestibule, floor of the mouth, and retromolar area. It has been proposed that disturbance in glucose and lipid metabolism, hormone therapy, and trauma can lead to the formation and proliferation of the tumor.

\textbf{Conclusion:} Fibrolipoma of the tongue is a rare occurrence. Surgical excision is the ideal management strategy. Histopathological examination is the gold standard for definitive diagnosis.

\section*{1. Introduction}

Lipoma is a benign soft-tissue tumor with a mesenchymal origin. It primarily consists of mature adipocytes, hence they can occur in any part of the body where fat is present. It is a common tumor that compromises 4–5% of all benign neoplasms in the body \cite{1,2}. It has a solitary and slow growing nature, it occurs frequently in the upper trunk, abdomen, shoulders, followed by head and neck \cite{3,4}. Based on the morphological features, multiple histological variants of the tumor exist, including conventional lipoma, fibrolipoma, angiolipoma, myelolipoma, and spindle cell lipoma \cite{5}. Fibrolipoma is considered a least frequent variant of lipoma in which adipose tissues are embedded within dense collagen fibers \cite{6}. Fibrolipoma, even other variants of lipoma have rarely been reported in the oral cavity \cite{1}. An even rarer phenomenon is the occurrence of fibrolipoma in the tongue with only a few cases have been reported in the English literature \cite{7}.

This study aims to report a very rare case of tongue fibrolipoma, with a brief review of the literature. The report has been written in line with SCARE 2020 guidelines \cite{8}.

\section*{2. Case presentation}

\textbf{Patient information:} A 53-year-old female presented with a painless mass at the anterior part of the tongue. The mass has been present since birth and it has grown gradually over the last 2 years. She was a known case of diabetes mellitus and underwent thyroid surgery. She was on insulin (10 IUx2) and thyroxin medication (100 Mgx1).

\textbf{Clinical findings:} There was a mobile round mass (2 × 2 cm) located at the anterior part of the tongue, with smooth surface and regular outline.

\textbf{Diagnostic approach:} Laboratory diagnosis showed a very low level of thyroid stimulating hormone (TSH) (<0.005 uIU/ml), high level of free T3 (7.16 Pmol/L) with normal free T4.

\textbf{Therapeutic intervention:} The patient underwent wide local excision and the sample was sent for histopathological examination which confirmed the diagnosis of fibrolipoma (Fig. 1).

\textbf{Follow-up and outcome:} The patient was discharged in a good health on the first postoperative day. A 2-month follow up showed no sign of reoccurrence.
As clinical examination can suspect the condition [12, 14, 17]. Imaging the recurrence of the tumor is extremely rare [15]. However, resection of the mass did not interfere with speaking.

Similar findings were observed in the current case. In order to confirm the diagnosis of the lipoma variant, histopathological examination is required as other methods can’t provide definitive diagnosis [64]. Under the microscope, fibrolipoma is made of mature adipocytes within lobules of dense collagen fibers, it can easily be distinguished from conventional lipoma because of more represented fibrous connective tissues [6, 12].

In conclusion, fibrolipoma of the tongue is an extremely rare condition. Surgical excision is the ideal management approach with a very low reoccurrence rate. Although lipomas are easily diagnosed clinically, histopathological examination stays as the gold standard for the definitive diagnosis.

Patient consent
Consent has been taken from the patient and the family of the patient.

Provenance and peer review
Not commissioned externally peer reviewed.

Conflicts of interest
There is no conflict to be declared.

Sources of funding
No source to be stated.

Ethical approval
Approval is not necessary for case report in our locality.

Consent
Consent has been taken from the patient and the family of the patient.

Author contribution
Abdulwahid M. Salih: surgeon managing the case, follow up the patient, and final approval of the manuscript. Ari M. Abdullah: pathologist examining the specimen. Final approval of the manuscript. Marwan L. Fatah, Berwn A. Abdulla, Shvan M. Hussein, Fahmi H. Kakamad: literature review, writing the manuscript, final approval of the manuscript.

Registration of research studies
According to the previous recommendation, registration is not required for case report.

Guarantor
Fahmi Hussein Kakamad is the Guarantor of submission.

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