

SPECIAL CASE REPORT

Suspected Oral Malignancy in the Dentoalveolar Region Associated with Oral Submucous Fibrosis

Department: Oral Medicine and Radiology

Date of Presentation: 06 August 2026

Case Category: Oral Potentially Malignant Disorder / Suspected Oral Malignancy

1. Patient Information

Parameter	Details
Patient Name	Mr. Krishnamoorthy
Age / Sex	55 years / Male
Place	Semmenchery, Chennai

Date of Presentation 06 August 2026

Patient-identifying information has been restricted in accordance with confidentiality requirements for website publication.

2. Chief Complaint

The patient reported **pain and swelling in the lower right posterior tooth region for approximately 3 months.**

3. History of Present Illness

The patient had been experiencing pain and swelling in the lower right mandibular tooth region for approximately three months. The pain was described as **severe and continuous**, with aggravation during mastication.

The patient also gave a history of dental extraction approximately two months prior to presentation.

4. Medical History

The patient is a **known diabetic for approximately two years** and is currently under medication.

5. Personal History

A history of **tobacco and betel-leaf chewing for approximately six years** was reported.

6. Dental History

The patient reported a history of dental extraction approximately two months prior to the present visit.

7. Clinical Examination

General Oral Findings

- Total number of teeth: **30**
 - Severe extrinsic stains
 - Severe generalised calculus deposits
 - Restricted mouth opening
 - Fibrous bands involving the bilateral buccal mucosa
 - Ulcerative proliferative lesion involving the mandibular posterior region
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8. Extraoral Examination

Extraoral examination revealed a **swelling over the mandibular region**, with greater prominence and tenderness over the lower jaw and submandibular region.

The overlying skin appeared clinically normal.

9. Intraoral Examination

An **ulceroproliferative growth** was observed in relation to **46 and 47**.

The lesion:

- Extended anteriorly from the distal aspect of **45**
- Extended posteriorly up to the mesial aspect of **48**
- Involved the buccal vestibule
- Measured approximately **5 × 3 cm**

- Showed bleeding on examination
 - Was non-scrappable
 - Had an ulcerative and proliferative appearance
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10. Palpation

On palpation, the lesion was:

- Warm
- Firm to hard in consistency
- Tender
- Non-scrappable
- Ulcerative
- Associated with bleeding
- Induration present

No pus discharge was noted.

The clinical findings were consistent with an **ulceroproliferative lesion requiring urgent evaluation for malignancy**.

11. Clinical Findings of Significance

The combination of the following findings raised clinical suspicion of an underlying malignant lesion:

- Persistent pain and swelling
- Ulceroproliferative growth
- Firm-to-hard consistency
- Bleeding
- Lesion size of approximately 5 × 3 cm
- Tobacco and betel-leaf chewing history
- Restricted mouth opening
- Associated oral submucous fibrosis
- Mandibular dentoalveolar involvement

12. Provisional / Working Diagnosis

1. Suspected carcinoma involving the mandibular dentoalveolar region in relation to 46 and 47

2. Oral Submucous Fibrosis

Bilateral involvement of the buccal mucosa with clinically evident fibrous bands and restricted mouth opening.

3. Generalized Chronic Periodontal Disease

Associated with severe generalized calculus and staining.

13. Differential Diagnosis

The following conditions may be considered in the differential diagnosis of an ulceroproliferative lesion of this nature:

- Oral squamous cell carcinoma
- Chronic traumatic ulcer with proliferative changes
- Chronic infective/inflammatory lesion
- Malignant lesion of odontogenic or alveolar origin

Histopathological examination is essential for definitive diagnosis.

14. Investigations / Recommended Diagnostic Work-up

Considering the clinical presentation and risk factors, the patient requires comprehensive evaluation, including:

1. **Incisional biopsy** of the representative lesion
2. **Histopathological examination** for definitive diagnosis
3. Appropriate radiographic evaluation of the mandibular region
4. Assessment of regional cervical/submandibular lymph nodes
5. Cross-sectional imaging where clinically indicated
6. Relevant investigations for assessment of systemic status and diabetic control
7. Further staging investigations if malignancy is histopathologically confirmed

15. TNM Staging

The case was clinically documented as:

T3 N2c M0 – Stage IVA

T3

Tumour measuring more than 4 cm in greatest dimension.

N2c

Metastasis in bilateral or contralateral lymph nodes, with no node exceeding 6 cm.

M0

No evidence of distant metastasis.

Stage Group

Stage IVA

Note: TNM staging should be considered provisional unless supported by appropriate clinical examination, imaging and/or histopathological findings documenting the relevant nodal and metastatic status.

16. Management Plan

The patient was:

- Counselling regarding the strong association between tobacco/betel-leaf chewing and oral potentially malignant and malignant lesions.
- Advised **complete cessation of tobacco and betel-leaf chewing**.
- Advised to undergo appropriate biopsy, imaging and staging investigations as indicated.

17. Clinical Significance

This case highlights the importance of **early recognition of potentially malignant and malignant oral lesions in routine dental practice**.

A persistent ulceroproliferative lesion, particularly in a patient with a history of tobacco and betel-leaf chewing, should be evaluated promptly. The presence of **oral submucous fibrosis**,

restricted mouth opening and a clinically suspicious ulceroproliferative lesion further emphasizes the importance of comprehensive oral examination and timely referral.

18. Learning Points

1. Persistent oral ulceroproliferative lesions require prompt evaluation.
 2. Tobacco and betel-leaf chewing are important risk factors for oral potentially malignant disorders and oral cancer.
 3. Oral submucous fibrosis should be identified and appropriately monitored.
 4. Restricted mouth opening may be an important clinical finding in advanced oral mucosal disease.
 5. Any clinically suspicious lesion should undergo appropriate diagnostic evaluation, including biopsy when indicated.
 6. Early detection and referral can facilitate timely diagnosis and management.
 7. Dental professionals have an important role in oral cancer screening and tobacco-cessation counselling.
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19. Referral and Outcome

The patient was referred to **VHS Cancer Centre** for further evaluation and management.

Follow-up: To be updated following specialist evaluation, biopsy/histopathology and subsequent treatment.

Documentation



Mandibular Ridge Resorption: Marked localized alveolar ridge resorption in the lower right edentulous region, demonstrating significant bone height loss adjacent to the tumor bed.

Associated Pathology: The pronounced marginal bone destruction highlights malignant/osteolytic tissue invasion with generalized horizontal alveolar bone loss across the remaining dentition.