

# What the ill-fitting denture can do to oral tissue?

## Case-report

[Assis. Prof. Sabah A. Rasool hammoodi \(FICMS, CABMS\)](#)

*\*Department of oral and maxillofacial surgery-college of dentistry-university of Anbar*

### Abstract

Ill-fitting dentures cause a wide variety of lesions ranging from simple inflammation to ulcerative pathological lesions. Each lesion must be carefully examined, investigated and treated accordingly. Giant cell lesion is one of soft tissue pathologies which may be induced by ill-fitting denture.

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A 82-year-old woman is referred by her local dentist for evaluation of a small mass in her right lower posterior gingiva.



### HPI

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The patient admits to a history of wearing of denture for about 1 year. More recently 3 months ago, she has noticed a lesion on her right lower posterior gingiva. The lesion is slightly painful, and there is history of bleeding from the area. She denies any other constitutional symptoms such as fever, weight loss, nausea, and vomiting.

### PMHX/PSHX/MEDICATIONS/ALLERGIES/SH/FH

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The patient has history of myocardial infarction 4 years ago, hypertensive and taking concor 5 mg, aspirin 80 mg, Pradaxa (dabigatran etexilate). Other medical history is **Noncontributory**. The patient has no history of tobacco use or alcohol consumption and no significant family history.

### EXAMINATION

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**Maxillofacial.** The patient is normocephalic, with no submandibular or cervical lymphadenopathy

**Intraoral.** The tongue, floor of mouth, hard and soft palate, and gingiva are all within normal limits. There is an 2.5 pedunculated oval, nonulcerated mass on the right lower posterior gingiva over alveolar crest. The lesion is not tender and is pink-blue color, firm consistency with irregular surface.



## **IMAGING**

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Orthopantomography (OPG) was taken to exclude bone involvement.



## **LABS**

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Complete blood count and bleeding screen tests were obtained due to underlying medical conditions of patient. Measurement of blood pressure was done.

## **DIFFERENTIAL DIAGNOSIS**

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The differential diagnosis of a soft tissue mass is considered as following: *Fibrous Inflammatory Hyperplasia*, Inflammatory Papillary Hyperplasia, *pyogenic granuloma*, *giant cell granuloma*, *benign mesenchymal tumor (such as neuroma)*, *malignant mesenchymal tumor (such as sarcoma)*, squamous cell carcinoma.

## **BIOPSY**

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Before taking incisional biopsy, the aspirin (antiplatelet) and Pradaxa (anticoagulant) were discontinued 3 days till normalization of coagulation profile tests (PT, PTT, BT, platelet count). Incisional biopsy (removal of a representative segment of the lesion) was taken from periphery of lesion and this allowed for histological confirmation prior to the definitive treatment. The biopsy report was **giant cell granuloma**.

Laboratory Test Results		Conventional Units	SI Units
Prothrombin Time		18.00 Sec	
Normal Range :		10.00 - 18.00	
Stago			
Partial Thromboplastin Time		34.00 Second	
Normal Range :		20.00 - 40.00	
Stago			
Bleeding Time		6.00 min	
Normal Range :		1.00 - 7.00	
Complete Blood Picture		مراقب طبيا بالرقم 34	



## DEFINITIVE TREATMENT

Excisional biopsy for histopathological analysis is both diagnostic and the definitive treatment. The entire specimen is then removed and sent for histological examination. The bleeding at surgical site was controlled by pressure with large gauze soaked in hemostatic solution and the wound is closed by continuous suturing.



## COMPLICATIONS

There are few complications that may result from excision of lesions from the posterior gingiva. There were: slight pain, swelling. No infection, postoperative bleeding or sensory changes were seen. Antibiotics and analgesics were prescribed with instructions of good oral hygiene.

## DISCUSSION

Peripheral giant cell granuloma (PGCG) is the most common oral giant cell lesion appearing as a soft tissue extra-osseous purplish-red nodule consisting of multinucleated giant cells in a background of mononuclear stromal cells and extravasated red blood cells. The etiology of (PGCG) is unclear, the most common theories of nature and origin: Reactive lesion: caused by local irritation or trauma from ill fitting denture, calculus, Periodontitis, periodontal surgery, overhanging restorations, and tooth extractions.

A possible hormonal influence for some PGCGs has been postulated by Whitaker and Bouquet.

## REFERENCES

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2. Roy 1. Bodine. Oral lesions caused by ill fitting dentures. *The journal of prosthetic dentistry*. VOLUME 21, ISSUE 6, P580-588, JUNE 01, 1969.