

原文題目(出處)：	Oral soft-tissue biopsy: An overview. J Can Dent Assoc 2012;78:c75
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內文：

#### Abstract

Biopsy is the removal of a tissue sample from a living body with the objective of providing the pathologist with a representative, viable specimen for histopathologic interpretation and diagnosis.

#### Types of Oral Lesions

stratified squamous epithelium overlying mesenchymal tissues  
appropriate depth varies from one lesion to another, depending on the thickness and location of the mass

I Benign/malignant neoplasms => from any of these tissue

II White/red => epithelial origin

1 Hyperplasia => accumulation of keratin

2 Atrophy => visualization of underlying vasculature

III Ulceration/papillary or verruciform

#### Preliminary Examination of the Lesion

I Comprehensive dental examination => visual and tactile

II Beginning with eliciting and documenting the pertinent history, including duration, any antecedent event, symptoms and changes in appearance, as well as prior diagnostic and therapeutic measures

III Location, size, colour, and consistency or texture of the lesion should be documented => photography

IV Differential diagnosis => biopsy sample => Referral to clinician with expertise in the diagnosis and management of oral disease

#### Indications for Biopsy

I Suspicion of malignancy

1 Enlarging mass

2 Chronic ulceration

3 Tissue friability induration on palpation

4 Persistence of mucosal changes despite removal of local irritants

II New or enlarging pigmented lesions => irregular border and nonhomogenous coloration

III Entities that appear to be clinically benign or reactive=>pyogenic granuloma/mucocele

IV widespread mucosal erythema and ulceration

1 Lichen planus

2 Mucous membrane pemphigoid

3 Pemphigus vulgaris

4 Other immune-mediated disorders

#### Contraindications for Biopsy

I Vascular lesion => significant hemorrhage

II Location of the lesion in an esthetic region / floor of mouth

III medically compromised patients

1 severe or poorly controlled systemic diseases

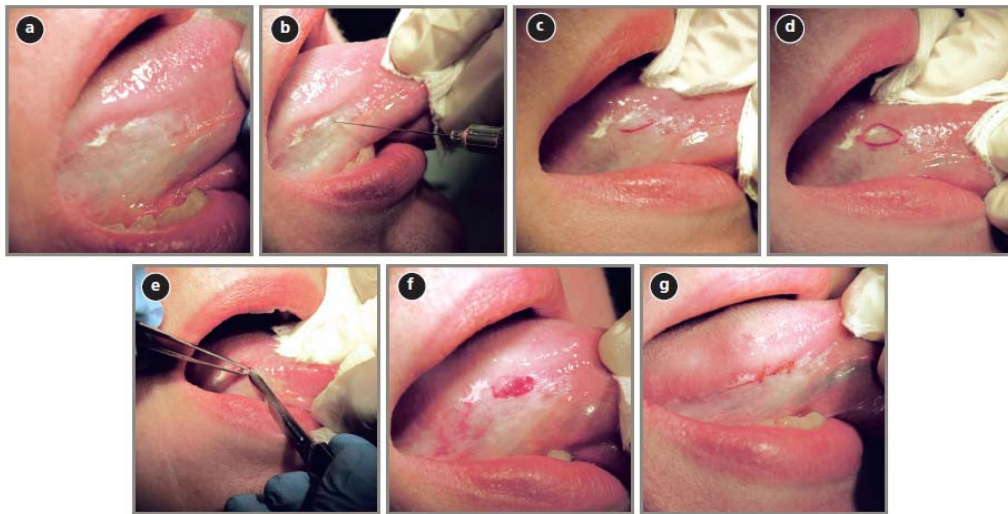
- 2 significant risk of hemorrhage
- 3 bisphosphonate therapy or radiotherapy

#### Biopsy Techniques

Scalpel biopsy, for both incisional and excisional procedures, is the most common technique and generally produces the most satisfactory samples.

##### I *Incisional Biopsy*

- 1 Differential diagnosis includes malignancy
- 2 Does not allow study of the entire lesion
- 3 Sample the tissue that has been most severely and significantly affected
- 4 Multiple biopsy samples => lesion is extensive / variety of clinical presentations
- 5 Principle guiding site selection → most representative sample



##### II *Excisional Biopsy*

- 1 Complete removal of a lesion
- 2 Lesion certainly benign
- 3 Size, accessibility and regional anatomy of the lesion must all be considered



##### III *Punch Biopsy*

- 1 Either incisional biopsy or excision of small lesion at accessible site => lateral tongue / buccal mucosa
- 2 Must be feasible for the device to approach the mucosal surface perpendicularly

- 3 Placed on the lesional tissue, and a downward, twisting motion is applied
- 4 Not appropriate for vesiculobullous diseases



#### IV *Electrosurgery and Laser Techniques*

- 1 With caution for diagnostic biopsy / information margins is required
- 2 Lasers may be of great value => wound left by scalpel biopsy in areas of the mouth => closure is difficult or inappropriate
- 3 Laser produces a zone of thermal coagulation smaller than that of electrosurgery



#### V *Adjunctive Techniques*

- 1 Brush biopsy  
=> screening modality for innocuous lesions not be sampled.
- 2 Nuclear stains => metachromatic dye (toluidine blue)
- 3 Autofluorescence => delineate field changes => guide excision

#### Special Considerations and Pitfalls

- I Extensive epithelial sloughing can make this type of biopsy extremely challenging.
- II Palatal biopsy => take into account the underlying vascular anatomy
- III Gingival biopsy => recession => esthetic defects and exposure of the root
- IV Lip biopsy
  - 1 Hemorrhage / mobility of labial tissue
  - 2 Local paresthesia may occur if nerves are severed

#### Biopsy Procedure

## I *Armamentarium*

The minimal requirements are as follows:

- blade handle and no. 15 blade
- fine tissue forceps (preferably Adson forceps)
- syringe and local anesthetic
- retractor appropriate for the site
- sutures, if needed
- needle driver
- curved scissors
- hemostatic agents (silver nitrate or absorbable gelatin sponge)
- gauze sponges
- specimen bottle containing 10% neutral buffered formalin
- biopsy data sheet



Figure 8. Basic armamentarium for biopsy.

## II *Consent*

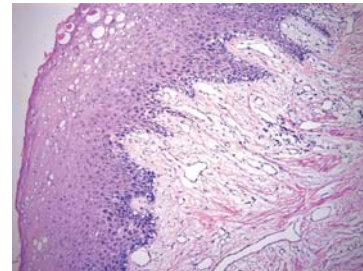
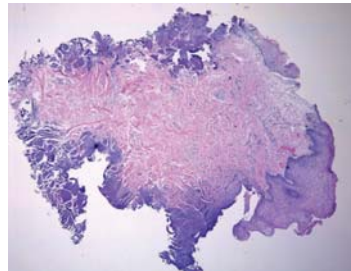
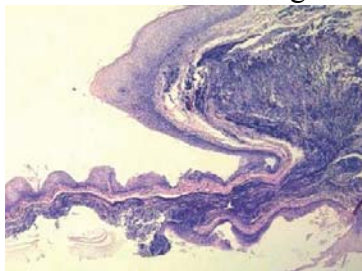
Verbal and written informed consent should be obtained before any biopsy

## III *Anesthesia*

- 1 Lidocaine 2% combined with epinephrine (for local hemostasis), at a ratio of 1:100 000
- 2 Less than one carpule, or 1.8 mL
- 3 Infiltrated

## IV *Handling of the Specimen*

- 1 Crush artifact => inappropriate compression from forceps.
- 2 Thermal artifact => laser or electrosurgery
- 3 Freezing



## V *Hemostasis*

- 1 Small biopsy wound => single interrupted sutures using resorbable plain gut
- 2 Gingival and palatal biopsies => absorbable gelatin sponge
- 3 Small wounds in the floor of the mouth => without primary closure => chemical cautery
- 4 Laser or electrosurgery

## VI *Postoperative Instructions*

**Postbiopsy instructions for the patient**

*Biopsy is a minor surgical intervention, but some basic instructions are important for you to know and apply.*

**Bleeding:** Some minor bleeding is expected. Your saliva may have a pinkish colour during the first day. If bleeding is heavy, you may apply pressure for several minutes by placing gauze (or even a moist tea bag) over the site of surgery.

**Diet:** Soft food and warm or cool beverages are acceptable. Avoid biting the biopsy site. Also avoid hot foods and beverages, which may scald the tissue.

**Swelling:** Soft-tissue swelling may occur and generally peaks after 48 hours. Apply a cold compress over the area if the swelling is bothersome.

**Sutures:** The sutures ("stitches") will dissolve in about 7 days. Do not attempt to remove the sutures by yourself. Occasionally, a suture may pop off earlier than expected. This is usually not a problem, so long as there is no bleeding.

**Analgesics (painkillers):** Prescription pain medications are seldom needed. If you are in pain, take the same over-the-counter medication that you would take for a headache, such as acetaminophen (Tylenol).

*If you have any questions, you may contact us at: \_\_\_\_\_*

*If there is an emergency, you may contact emergency services at: \_\_\_\_\_*

VII *Submission of Biopsy*

specimen should always be accompanied by pertinent clinical information  
=> patient's demographic data, clinical appearance, location of the lesion and any relevant medical history

VIII *Follow-up and Reporting of Biopsy Result to the Patient*

- 1 Patients should be seen 1 to 2 weeks postoperatively to ensure healing and to discuss the results of the biopsy
- 2 Explain diagnosis and further management => clinician

 Conclusion

- I Tissue biopsy is an indispensable tool
- II When in doubt => referred to a specialist(oral pathologist or oral surgeon)

題號	題目
1	Which one isn't indication of biopsy? (A) Lesion does not respond to routine clinical management (B) Any lesion with malignant characteristics (C) Lesions persist no longer than 10~14 days (D) Lesion that is the basis of extreme concern to the patient
答案(C)	出處：ORAL AND MAXILLOFACIAL SURGERY CH21 Principle of differential diagnosis and biopsy P.433 BOX21-2 indication for biopsy
題號	題目
2	Which type of biopsy is noninvasive? (A) Oral cytology-based procedure (B) Incisional biopsy (C) Excisional biopsy (D) Aspiration biopsy
答案(A)	出處：ORAL AND MAXILLOFACIAL SURGERY CH21 Principle of differential diagnosis and biopsy P.433~437