

In The Name Of God

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BIOPSY

History

How long has the lesion been present ?

Has the lesion changed in size?

Has the les symptoms are associated with the lesion ?

What symptoms are associated with the lesion ?

What anatomic location(s) is involved ?

Are there any associated systemic symptoms ?

Clinical examination :

1. Anatomic location of the lesion
2. the overall physical characteristic of the lesion
3. single versus multiple lesions
4. size and shape and growth presentation of the lesion
5. the surface appearance
6. lesion coloration
7. Sharpness of lesion borders and mobility
8. Consistency of the lesion to palpation
9. Presence of palpation
10. Examination of regional lymph nodes .

Indications for Biopsy

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- 1. Lesions with no identifiable cause that persist for more than 10 to 14 days despite local therapy .
- 2. Intra bony lesions that appear to be enlarging
- 3. Visible or palpable sub mucosal swelling beneath clinically normal mucosa
- 4. Malignant lesions
- 5. Persistent pathologic conditions that can not be clinically diagnosed
- 6. Any lesion that has grown rapidly
- 7. Any lesion that is firmly attached or fixed to adjacent anatomic structures
- 8. Red , white , or pigmented mucosal lesions for which the diagnosis is not evident
- 9. Any unknown lesion in highrisk areas

Characteristic of lesions that raise suspicion of malignancy

- **B**leeding : Lesions bleeds on gentle manipulation
- **D**uration : Lesions has persisted more than 2 weeks
- **E**rythro : Lesion is totally red or has a speckled red and white appearance
- **F**ixation : Lesion feels attached to adjacent structures
- **G**rowth rate : Lesion exhibits rapid growth
- **I**nduration : Lesion and surrounding tissue are firm to the touch
- **U**lceration : Lesion is ulcerated or presents as an ulcer

biopsy in and around the oral cavity

1. Cytologic biopsy
2. Aspiration biopsy
3. Incisional biopsy
4. Excisional biopsy

Oral cytology :

These tests are generally used as screening or follow up adjuncts to careful clinical examinations.

- Two types:

1. Oral brush
2. cytologic examination of mucosal cells



Aspiration Biopsy :

Aspiration biopsy is performed with a needle and syringe by penetrating a suspicious lesion and aspirating its contents .

Fine Needle Aspiration

A 16 to 18 gauge needle connected to an aspirating syringe is used .

Aspiration

1. Inability to aspirate shows solid tumor
2. Straw - colored fluid shows cyst
3. Pus shows infectious process
4. Air shows traumatic bone cavity
5. Blood shows vascular lesion



Incisional Biopsy :

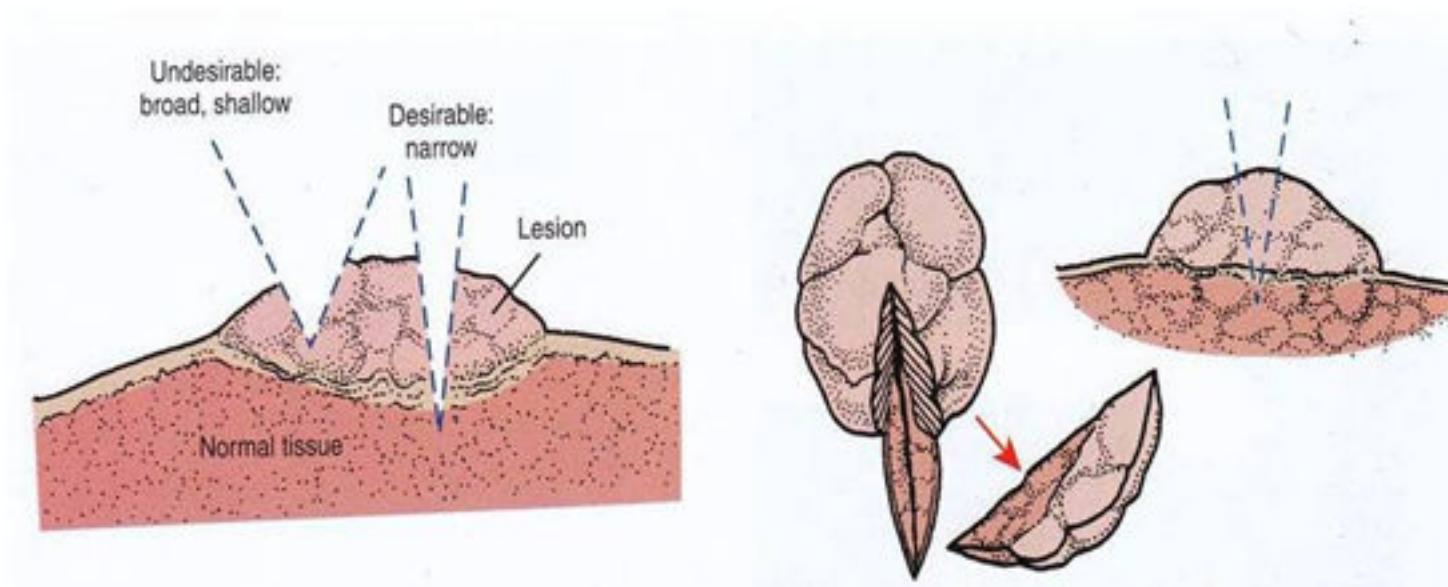
An incisional biopsy is a biopsy procedure that removes only a small portion of a lesion.

Indications :

1. The lesion is larger than 1 cm diameter
2. The lesion is located in a risky or hazardous location
3. When ever a definitive histopathologic diagnosis is desired

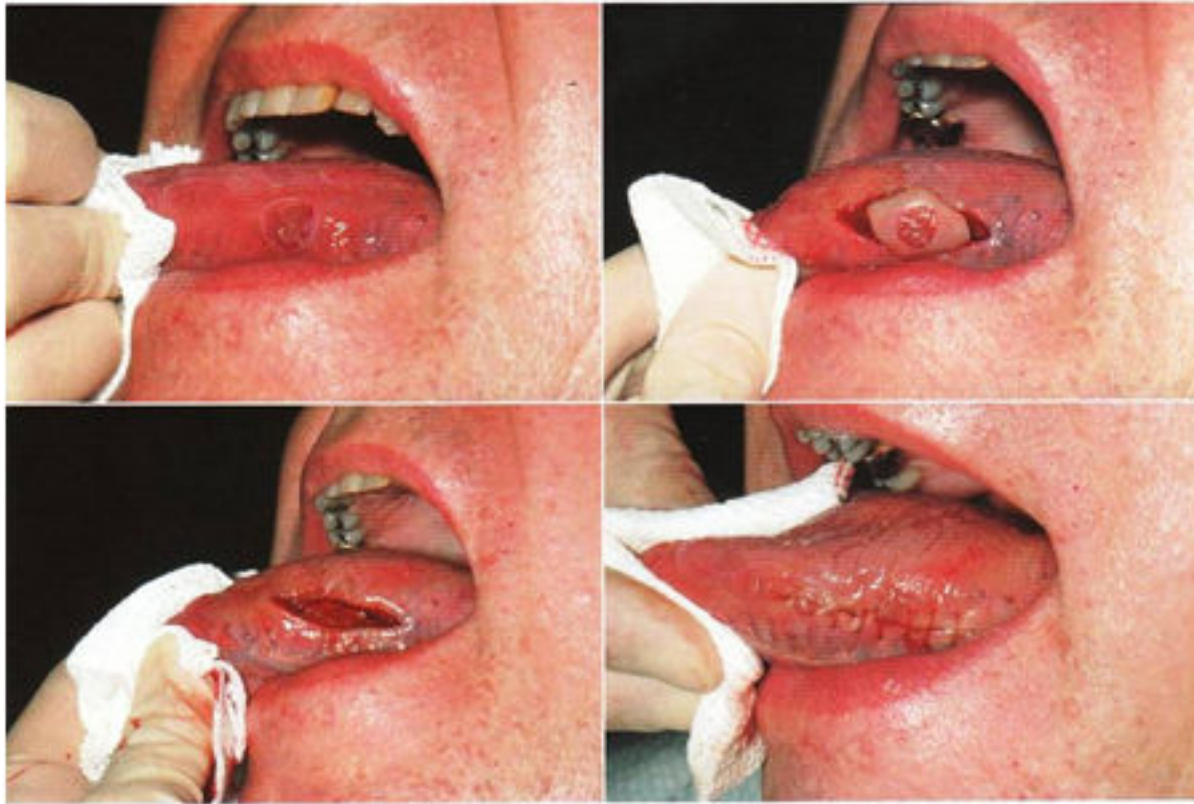
Technique of incisional biopsy:

The biopsy is generally excised as a wedge of tissues in such a manner as to include normal and abnormal appearing tissues in the sample .



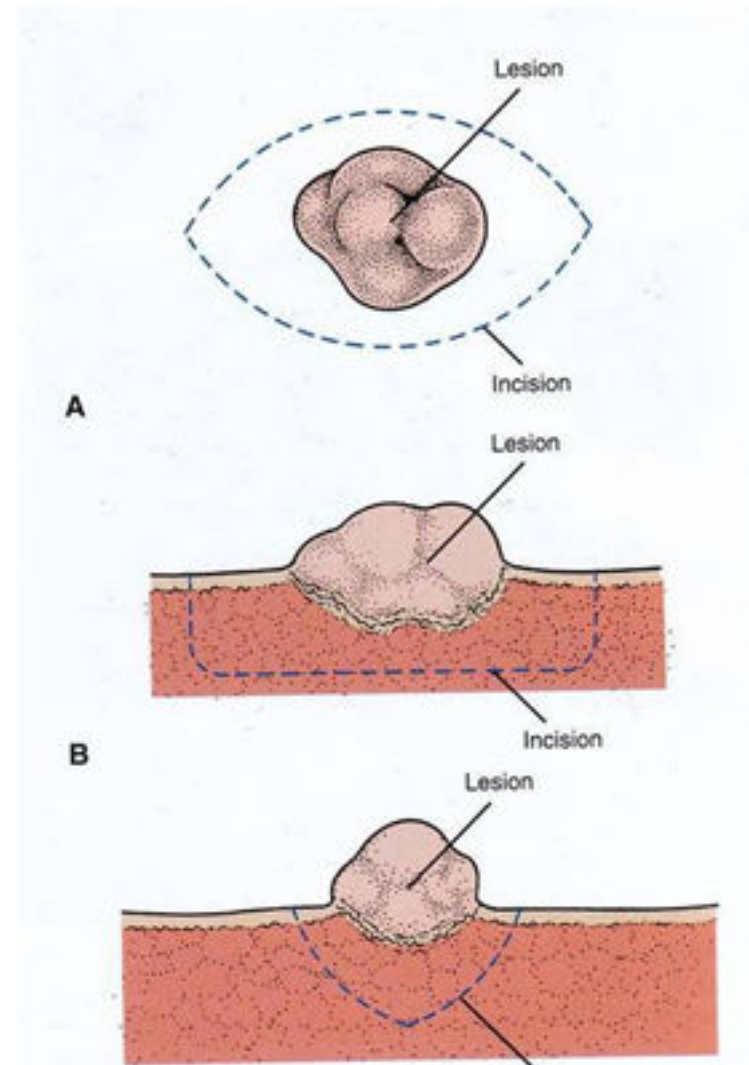
technique of Excisional Biopsy :

Removal of a lesion in it's entirety , to include 2 to 3 mm perimeter of normal tissue around the lesion.



Indications:

1. Lesions that can be removed without excessively compromising the patient's features or oral function
2. Excisional biopsy is reserved for lesions smaller than 1 cm in diameter



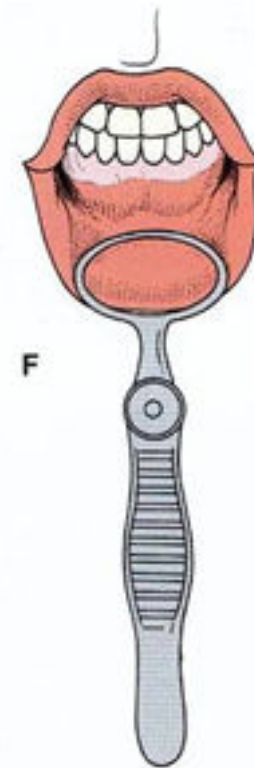
Soft tissue biopsy

Anesthesia

1. Block anesthesia
2. Peripheral infiltration : at least 1 cm a way from the lesion

**Tissue stabilization :*

1. The surgical assistant (reduction of bleeding and retraction of lips)
2. Towel clips , adson forceps , chalazation forceps , suture .



Incisions :

1. Sharp scalpel
2. No .15 blade

- *Wound closure :*

layering closure , using a resorbable suture material

seperation of mucosal from sub macosal tissues

Intra osseous (hard tissue) biopsy

Excision biopsy (enucleation) for odontogenic cysts and periapical granulomas

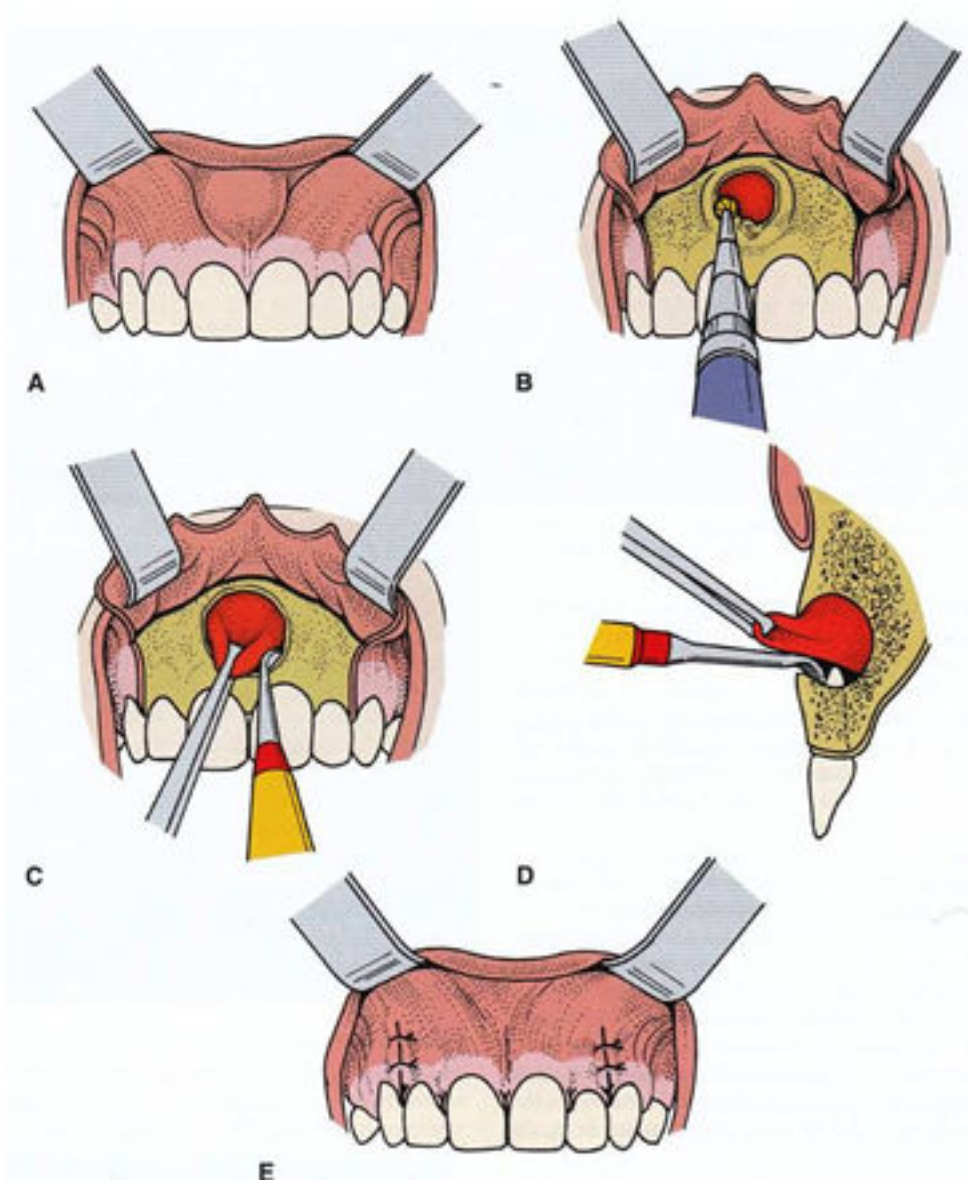
Incisional biopsy for large lesion ,peroration into soft tissues And suspicion of malignancy

Mucoperiosteal flaps :

1. The type of MP flaps depends on size and location of lesion
2. The flap must be extend 4 to 5 mm beyond the surgical margins of bony defect
3. Full thickness MP flaps .

Osseous window

1. If the cortical bone is intact , a round surgical bur can be used .
2. The size of window depends on the size of the lesion and proximity of anatomic structures .



follow-up

1. If the lesion is thought to be benign routine follow up
2. If an incisional biopsy was performed reevaluation and definitive treatment and

The end