





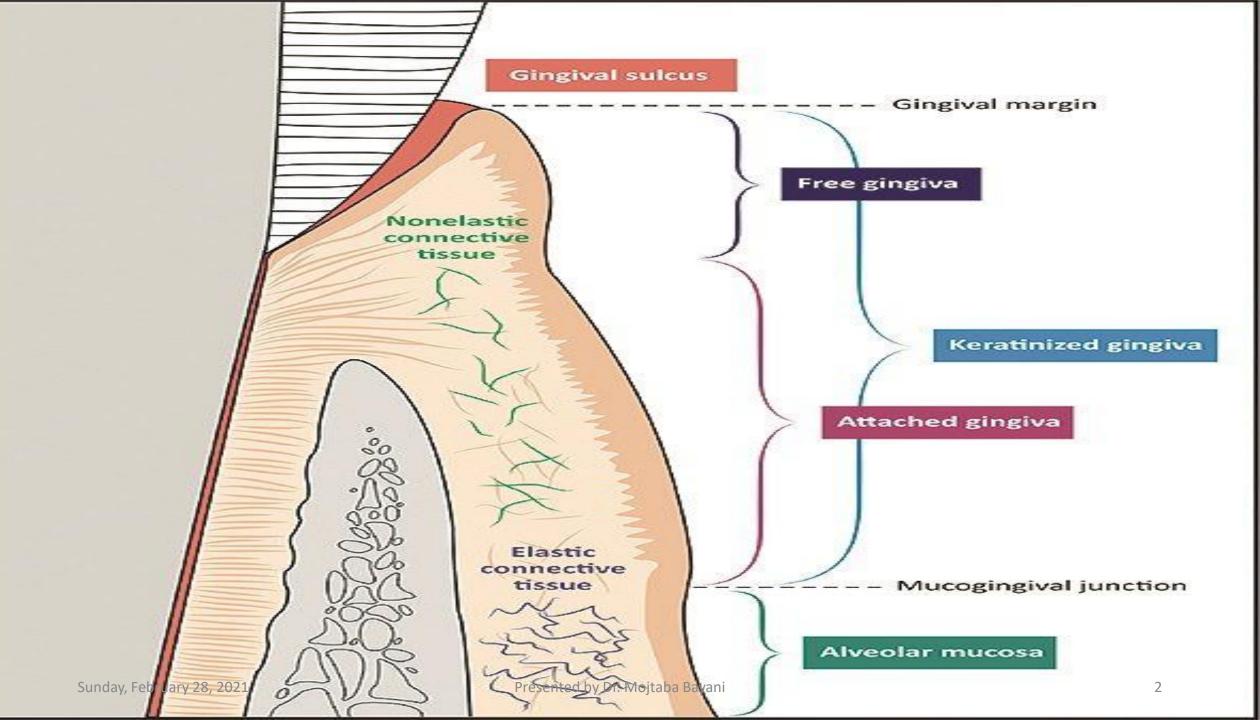
#### Surgical considerations on Crown Lengthening procedure

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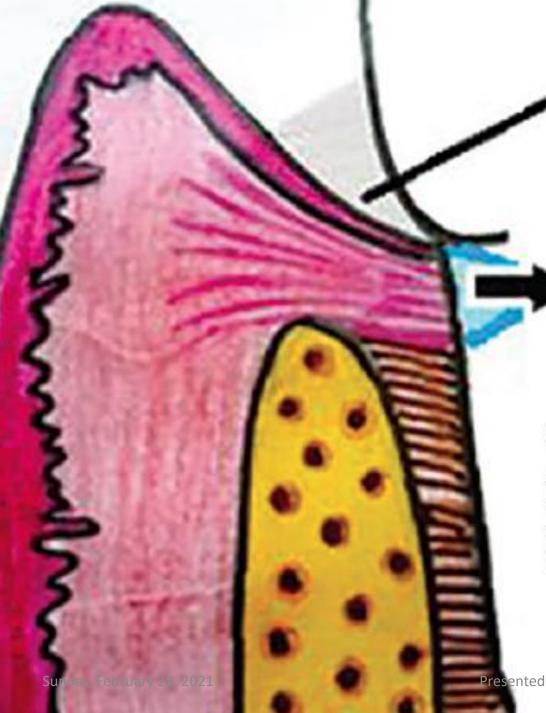


#### Biological width concept



#### **Gingival sulcus Epithelial attachment** Biologic 0.97 mm width **Connective tissue** 2.04 attachment mm 1.07 mm

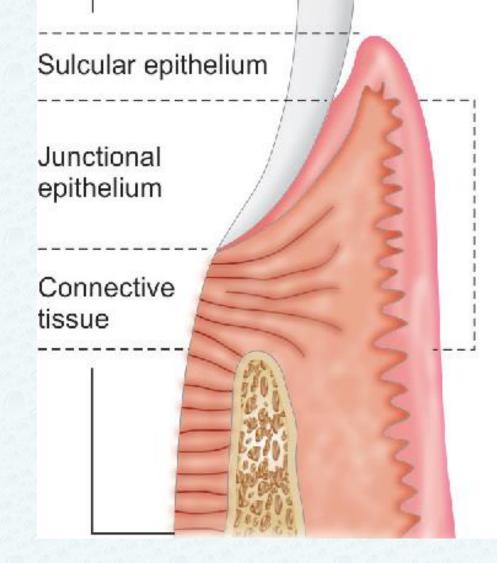
Dentine-Pulp Complex



#### BIOLOGIC WIDTH

SULCUS

epithelial + connective tissue attachment : 0.97 +1.07 = 2.04mm



Biologic width Garguilo et al (1961) JE = 0.97 mm CT = 1.07 mm 2.04

Vacek et al (1994) JE = 1.14 mm CT = 0.77 mm 1.91



### Violation of the biologic width leads to ultimate failure of the restoration





#### Evaluation of biologic width violation:

> Chronic progressive gingival inflammation around the restoration.

- Bleeding on probing.
- > Localized gingival hyperplasia with minimal bone loss.
- ➤ Gingival recession.
- Pocket formation.
- Clinical attachment loss.
- Alveolar bone loss.
- Gingival hyperplasia



#### Margin placement - Rules

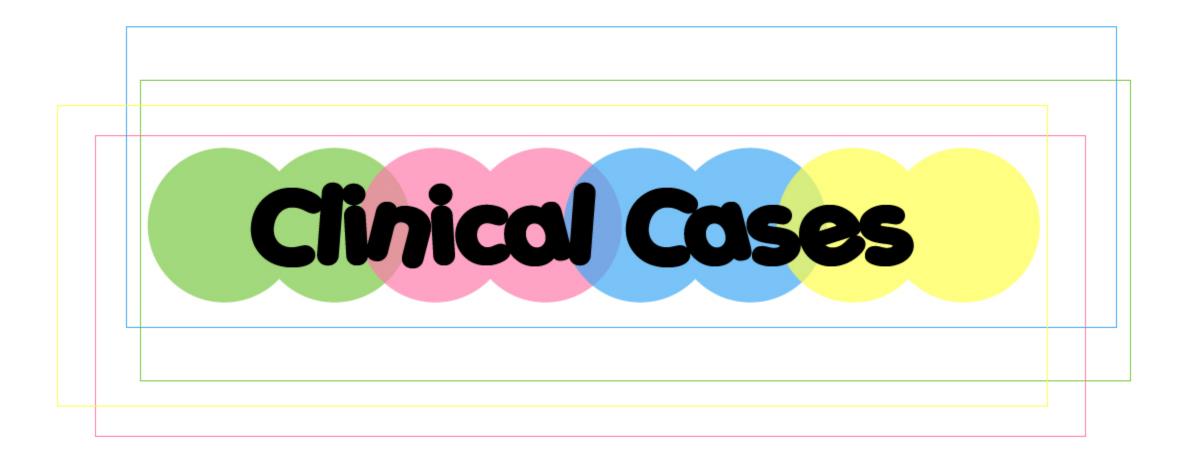
If the sulcus probes <2 mm, the restorative margin can be placed in half the depth of the sulcus.</p>

If the sulcus is >2 mm, gingivectomy could be performed to lengthen the tooth, and create a 1.5 mm sulcus. Then the patient can be treated as per rule 1.



#### If the margin must be placed subgingival:

- > Correct crown contour in the gingival third.
- Correct polishing.
- > Rounding of the margins.
- > Sufficient zone of the attached gingival.
- > No biologic width violation.





- Poor oral hygiene
   Endedontia traatma
- Endodontic treatment
- Caries removing
- Muscles destination
- Amount of attached gingiva
- Furcation involvement
- Accessibility
- No maintainability





#### > Mobility

- Muscles destination
- Amount of attached gingiva
- Future restoration





Amount of attached gingiva
 Excessive wear
 Future restoration
 Lip line (at rest and smiling)
 Posterior edentulous





- Excessive wear
- Powerful bite force
- Future restoration
- > Mobility
- Lip line (at rest and smiling)
- Posterior edentulous







- Future restoration
- Leveling of gingiva
- Lip line (at rest and smiling)
- Mobility
- Phenotype of periodontium





- Adjacent teethAccessibility
- Muscles destination
- Amount of attached gingiva
- Furcation position





## Accessibility Future restoration Furcation position Adjacent teeth Previous defective restoration No maintainability





- Future restoration
- Gingival un leveling
- Lip line (at rest and smiling)
- Phenotype of periodontium



# **WE WANT YOUR FEEDBACK!**





#### Crown root ratio

- Future restoration
- Lip line (at rest and smiling)
- Furcation position
- > Mobility
- No maintainability





## Accessibility Adjacent teeth Future restoration Lip line (at rest and smiling) Furcation position





- Periodontal supporting tissue
- Crown root ratio
- Future restoration
- Mobility
- Phenotype of gingiva
- Amount of attach gingival
- Abfraction lesion





- Gingival un leveling
   Lip line (at rest and smiling)
   Phenotype of periodontium
- Conservative approach



## YOUR OPINION MATTERS







Sunday, February 28, 2021

hank Uou!