

الله أكبر
محمد وآله

A close-up photograph of a dental procedure. A metal instrument, likely a scaler or curette, is being used on a tooth. The tooth is partially covered with a white protective material. The background is a soft, out-of-focus pinkish-red color, possibly representing the gingiva or a dental model.

THE CONCEPT OF CROWN LENGTHENING

Dr Fateme Abdolalian

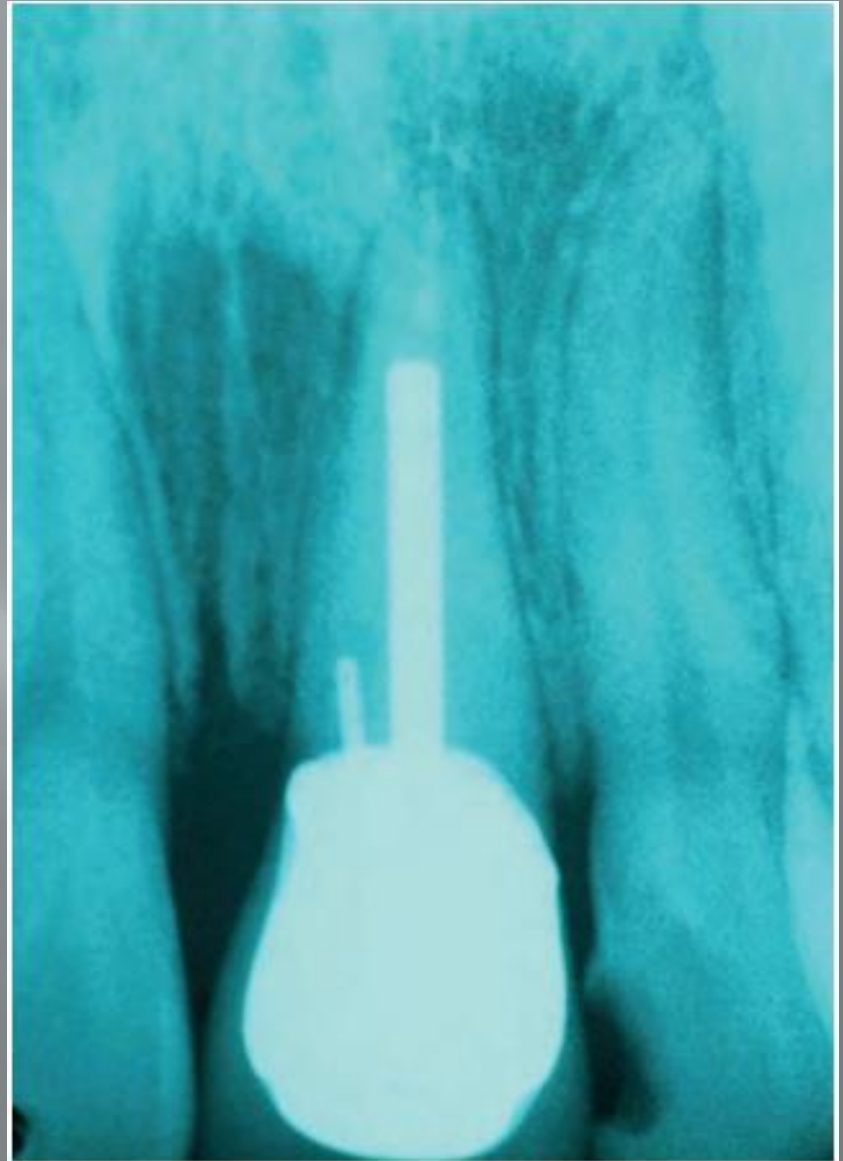
Assistant Professor of Arak University of Medical Sciences

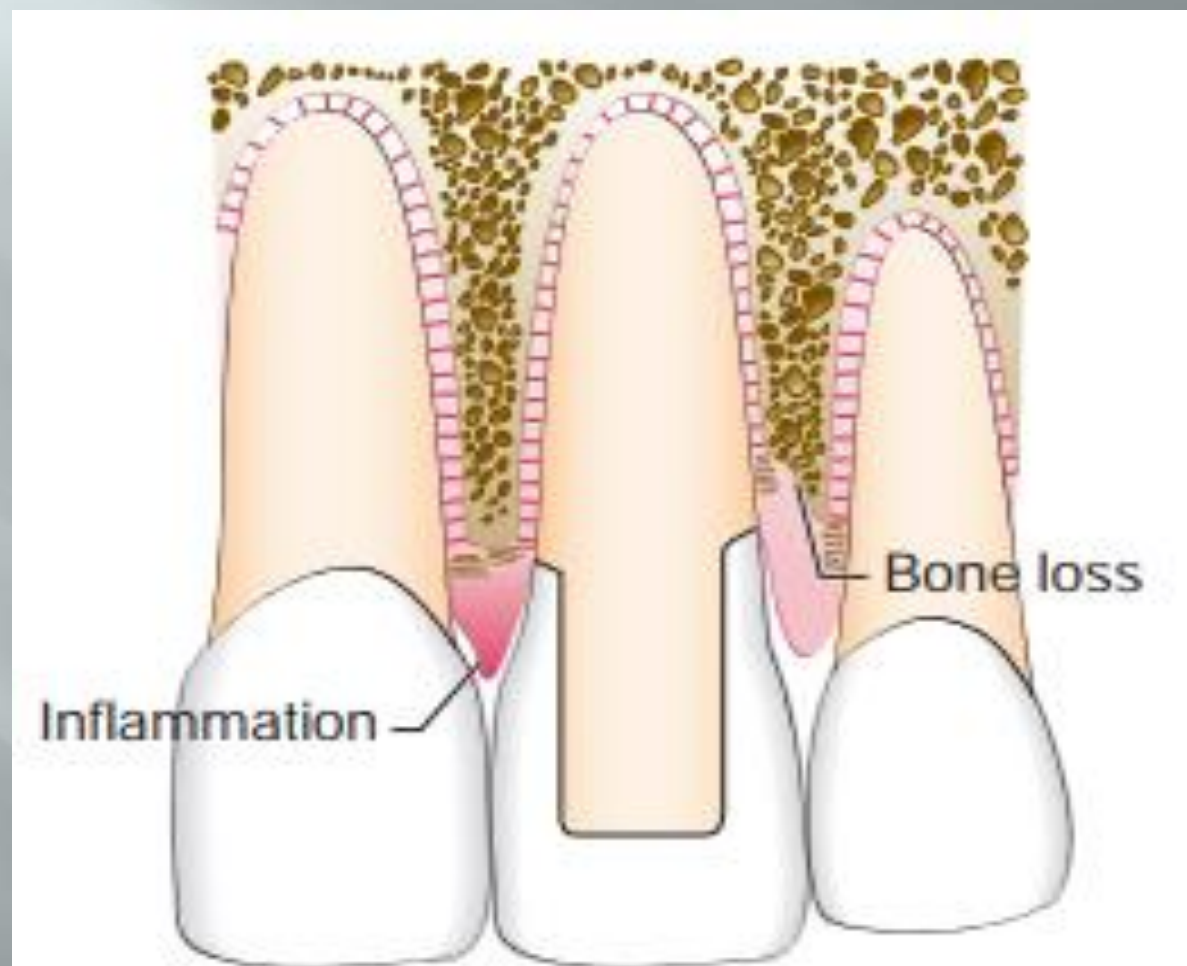
Department of Periodontology



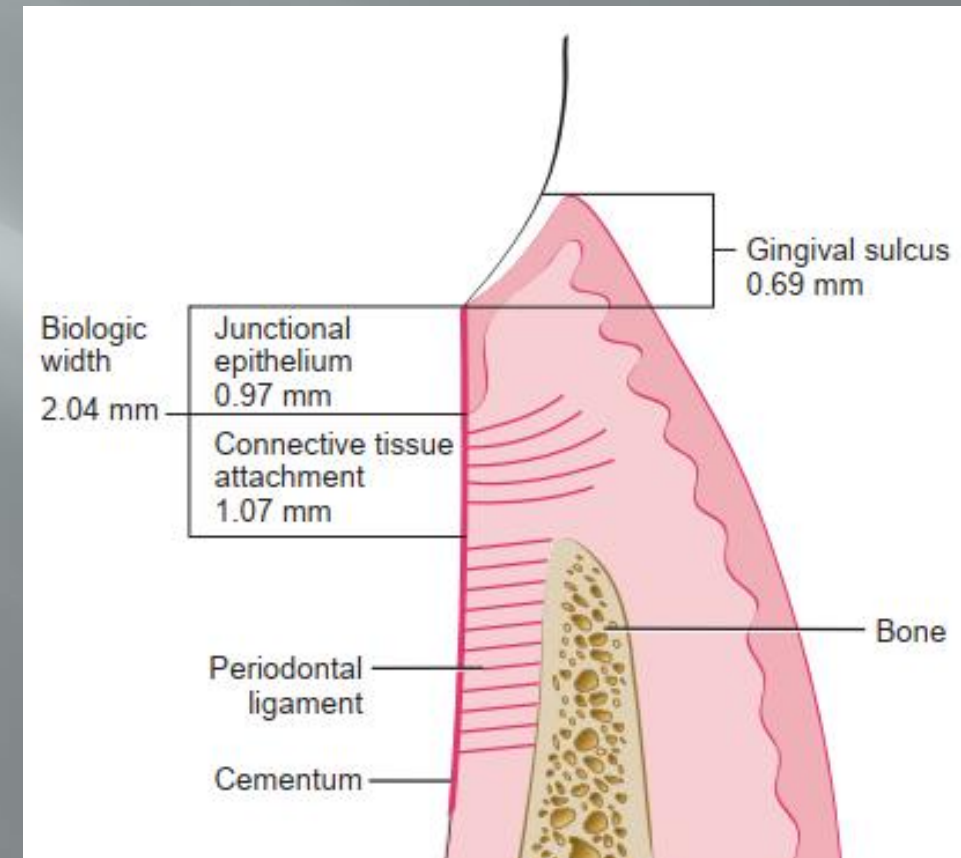
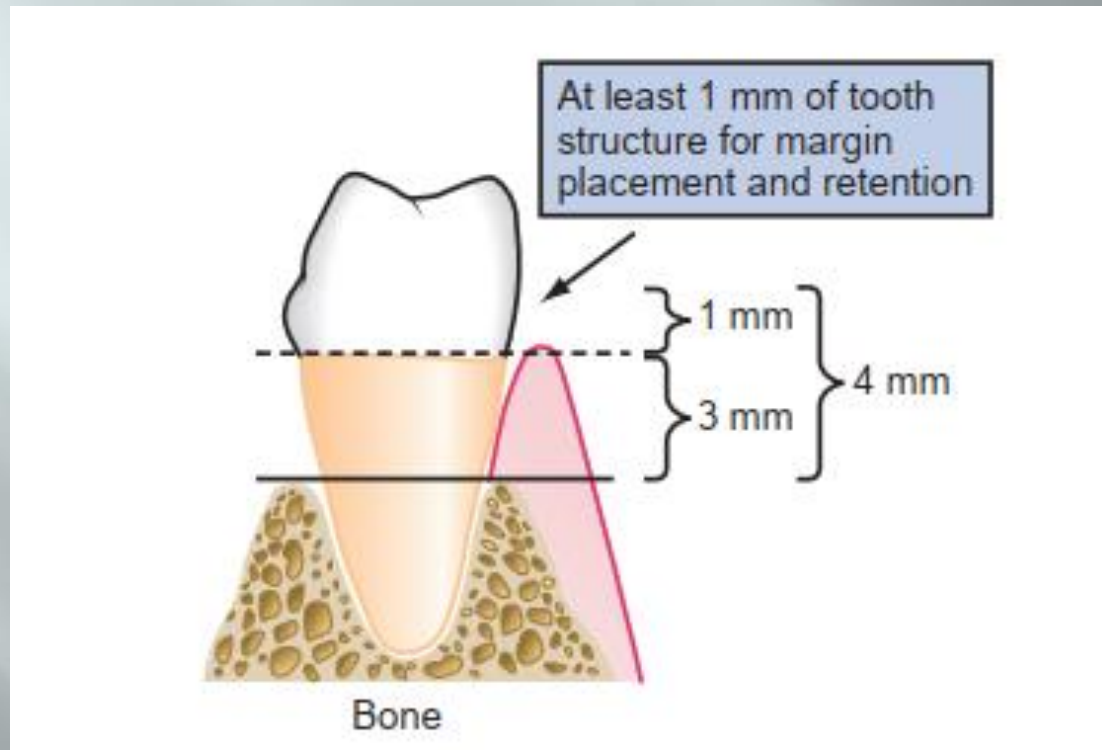








Biologic Width (supracrestal attached tissues)



An example of a patient I treated in 1983, the left central prep was done by sounding to bone and placing the margin 2.5mm from bone, the tissue became inflamed within 12 weeks, this photo was taken 12 years later, and the tissue is still inflamed, the illustration on the right shows one possibility, a taller than normal biologic width, in this example a 3mm biologic width, where my margin being 2.5mm from bone would have violated the attachment

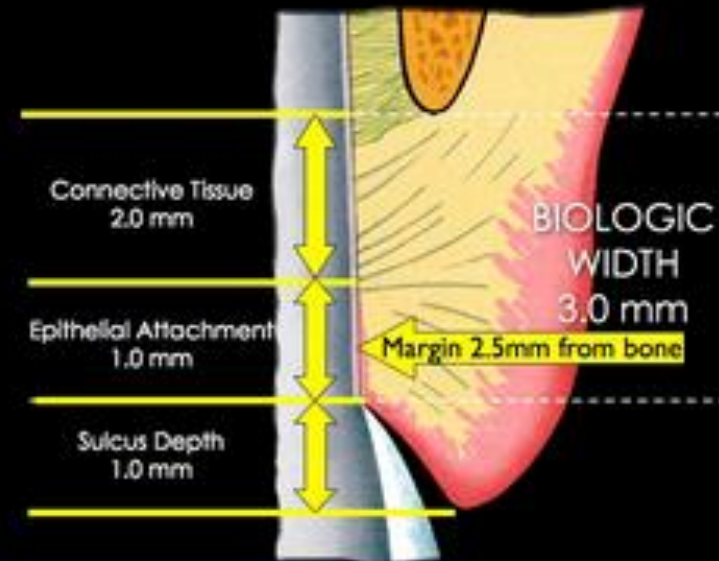
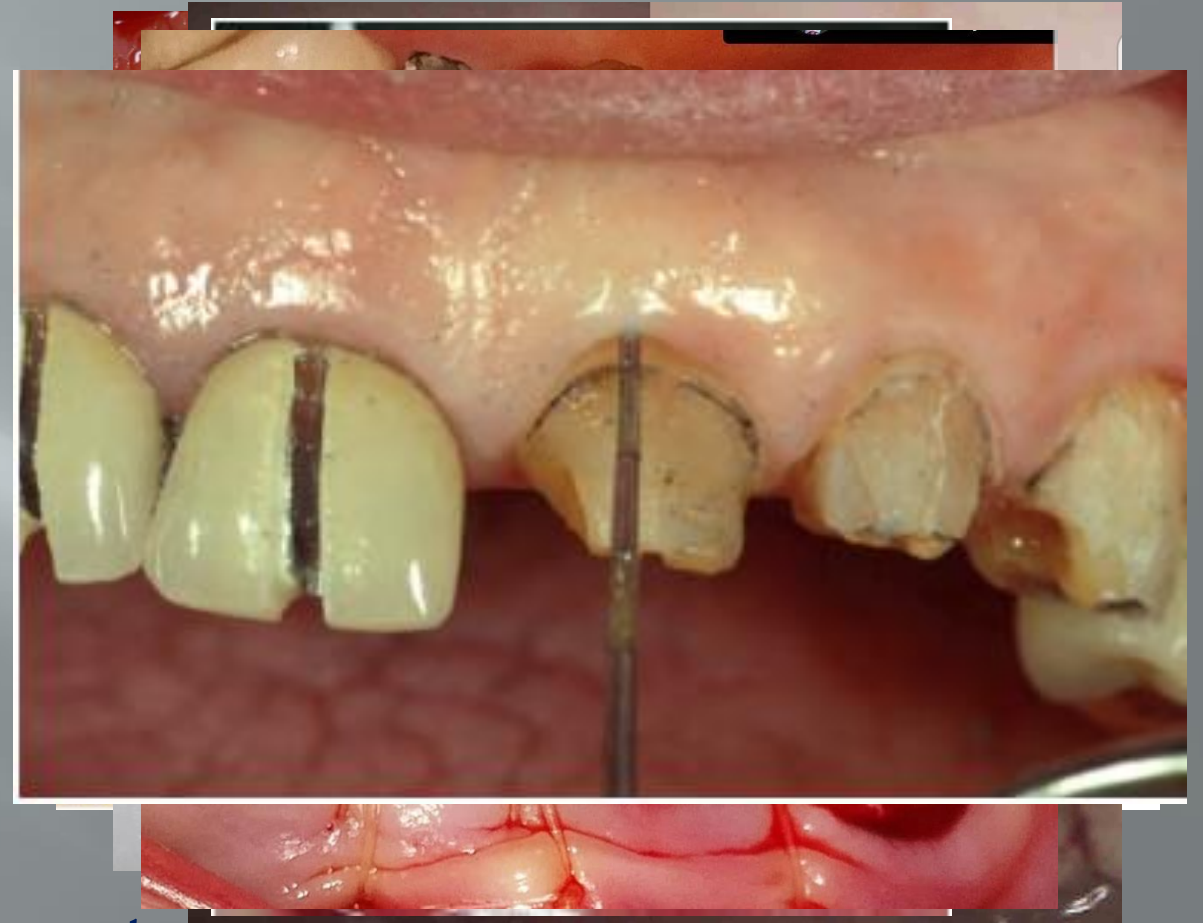


Fig. 3

Clinical Evaluation

- ▣ 1. Sulcus depth
- 2. Biologic width
- 3. Osseous crest
- 4. Pulpal involvement
- 5. Apical extent of fracture
- 6. Gingival health
- 7. Furcation location
- 8. Anticipated final margin placement



Radiographic Analysis

- ▣ PA parallel
- ▣
 1. Level of alveolar crest
 2. Apical extent of fracture or caries
 3. Pulpal involvement
 4. Root length
 5. Root form
 6. Furcation
 7. Crown-to-root ratio (at present or posttreatment)
 8. Root trunk length

Level of alveolar crest



Apical extent of fracture or caries



Pulpal involvement



Root length and form



Furcation



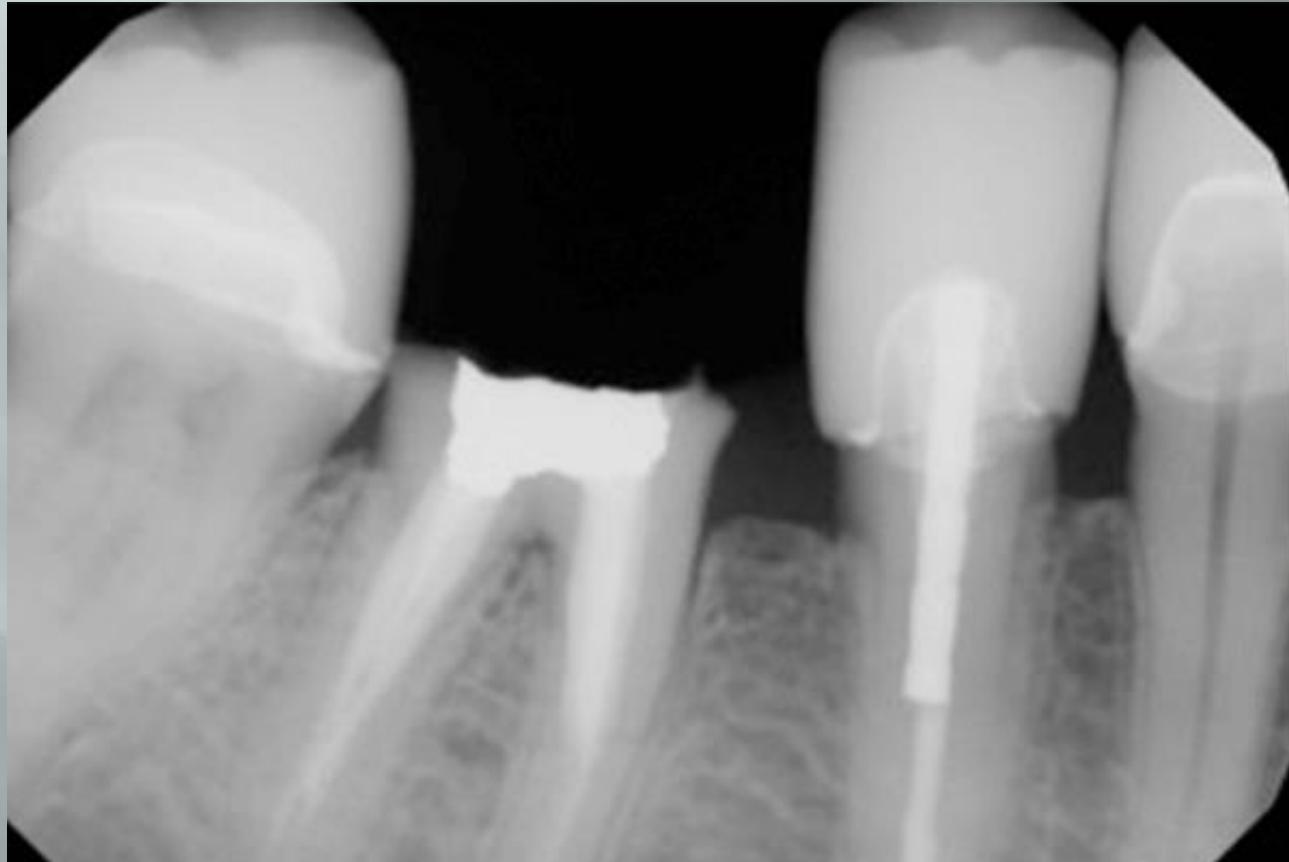
Crown-to-root ratio (at present or posttreatment)



Crown-to-root ratio (at present or posttreatment)



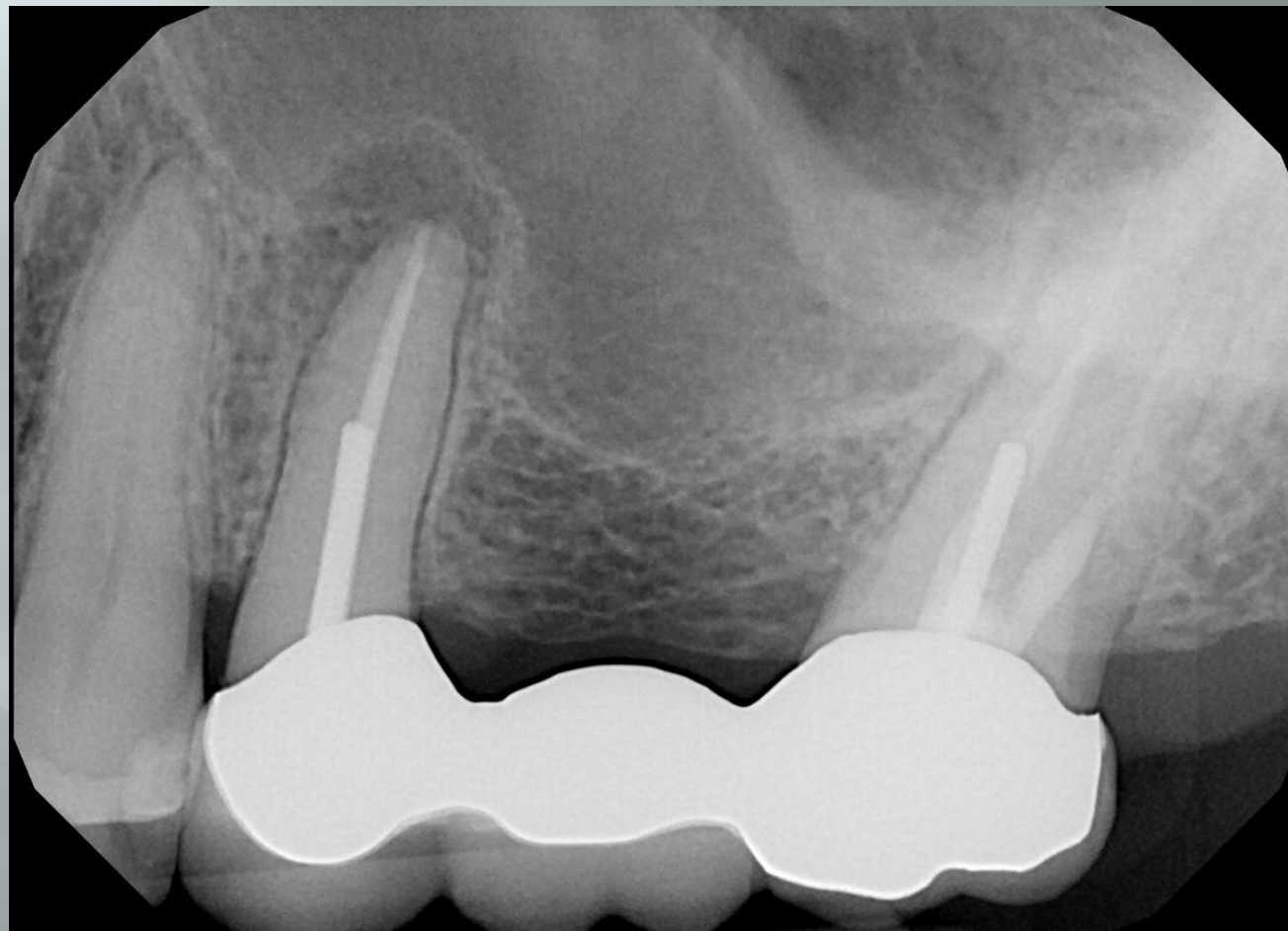
Root trunk length



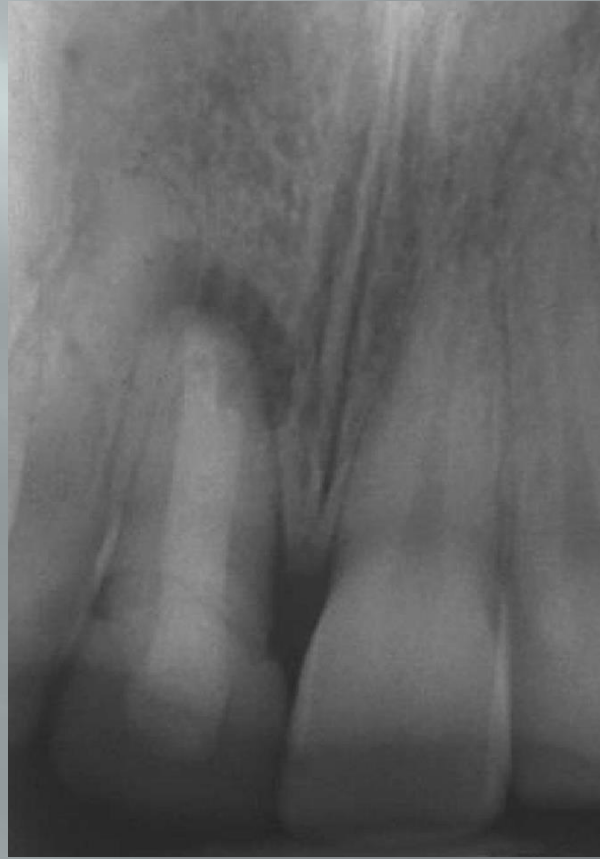
Compromise of adjacent periodontium or esthetics



use of the tooth as an abutment

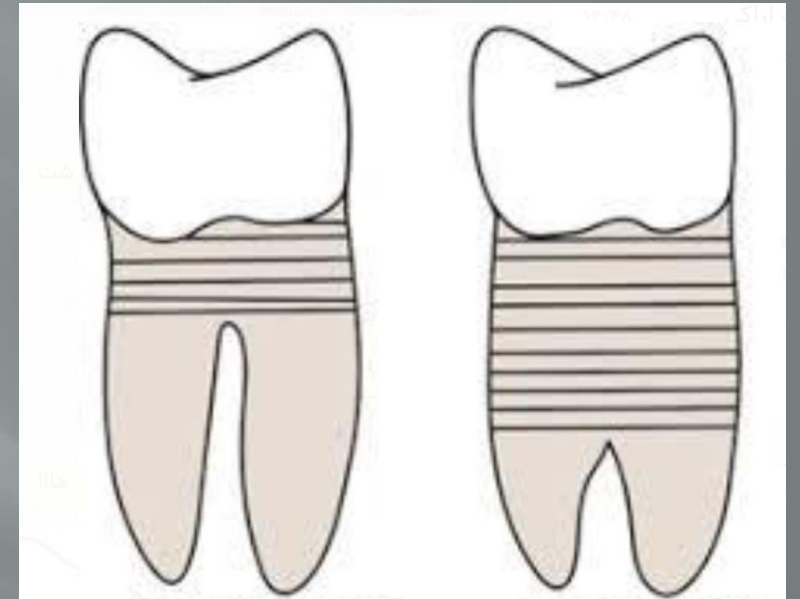


presence of a large periapical lesion



Contraindications and Limiting Factors

- 1. Inadequate crown-to-root ratio
 - 2. Nonrestorability of caries or root fracture
 - 3. Esthetic compromise
 - 4. High furcation
 - 5. Inadequate predictability
 - 6. Tooth arch relationship inadequacy
 - 7. Compromise of adjacent periodontium or esthetics
 - 8. Insufficient restorative space
 - 9. Nonmaintainability
-
- Orthodontic intrusion or extrusion may be able to overcome some of these factors.



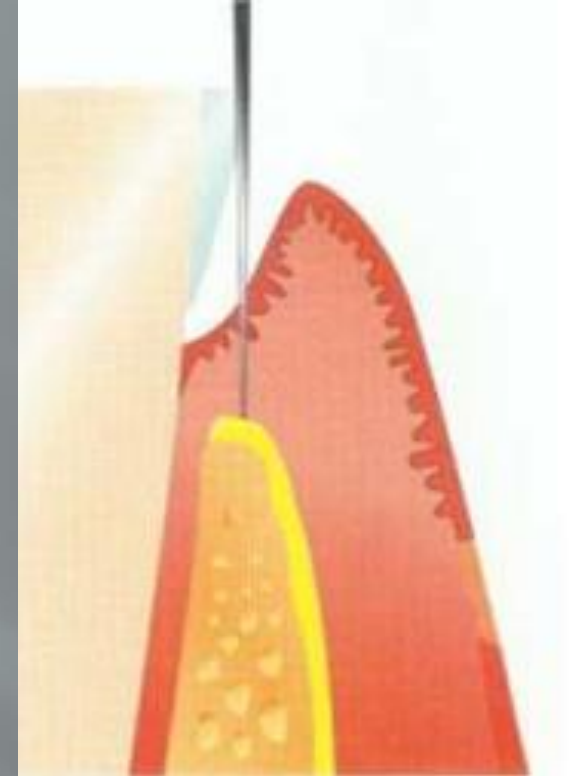
Incisions



Reverse bevel incision
Used for gingivectomy



Internal bevel incision



Sulcular incision

Incisions



Internal bevel incision



Sulcular incision



Interdental incision





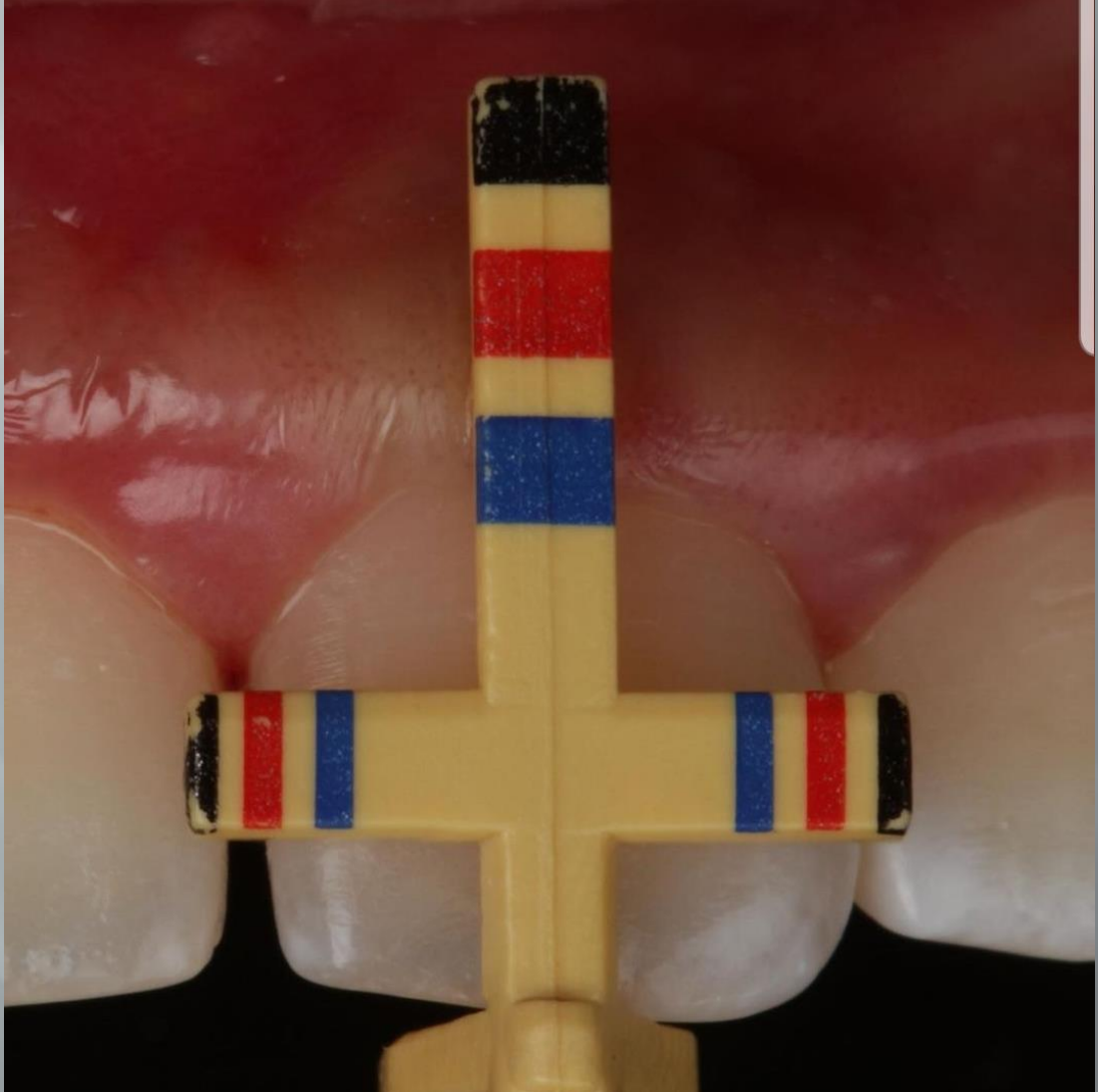






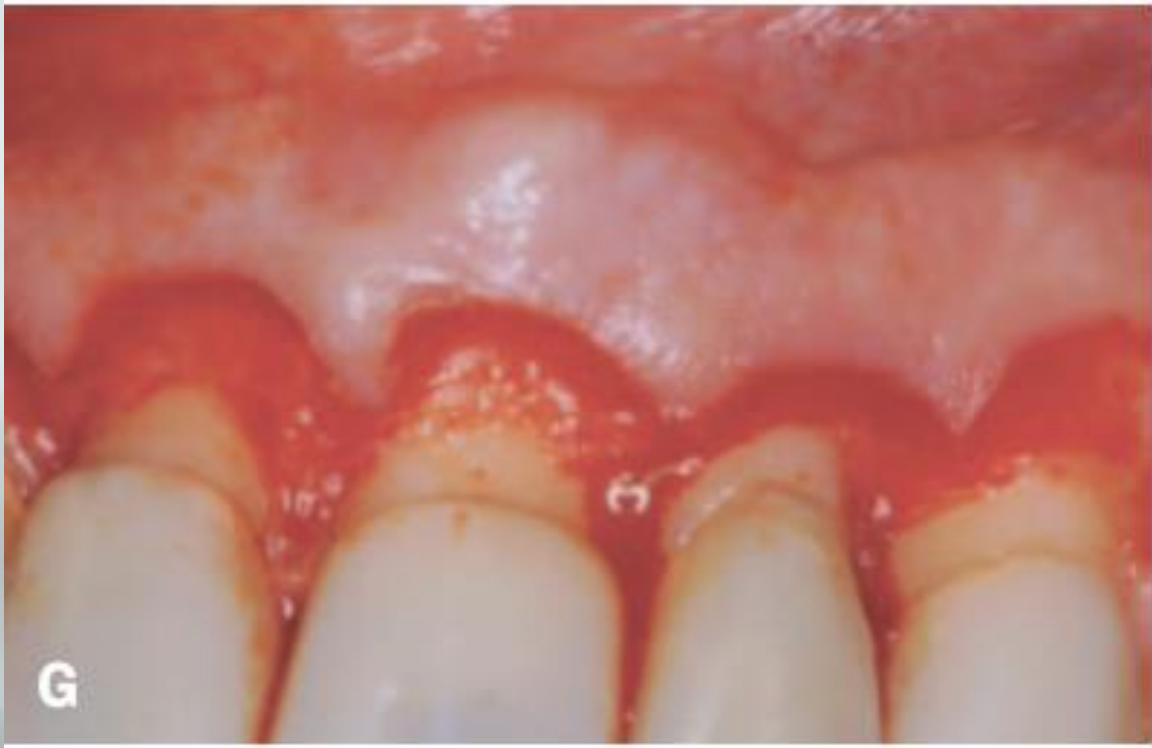














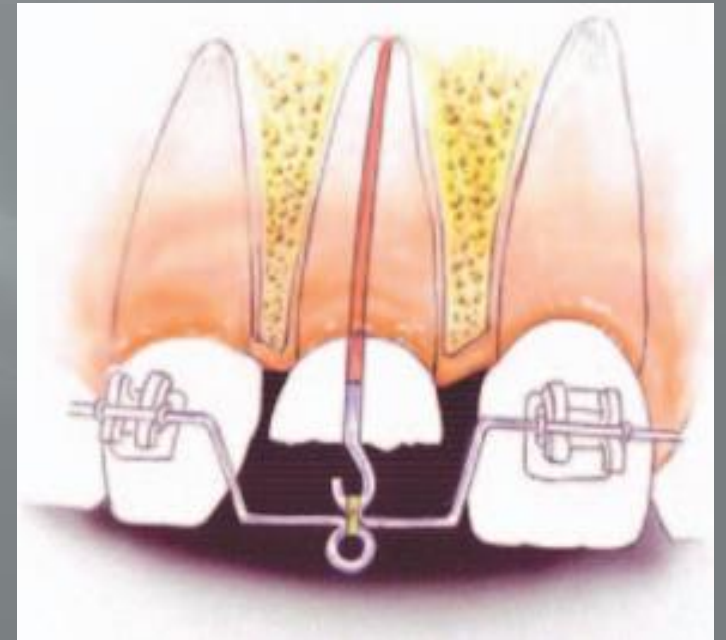
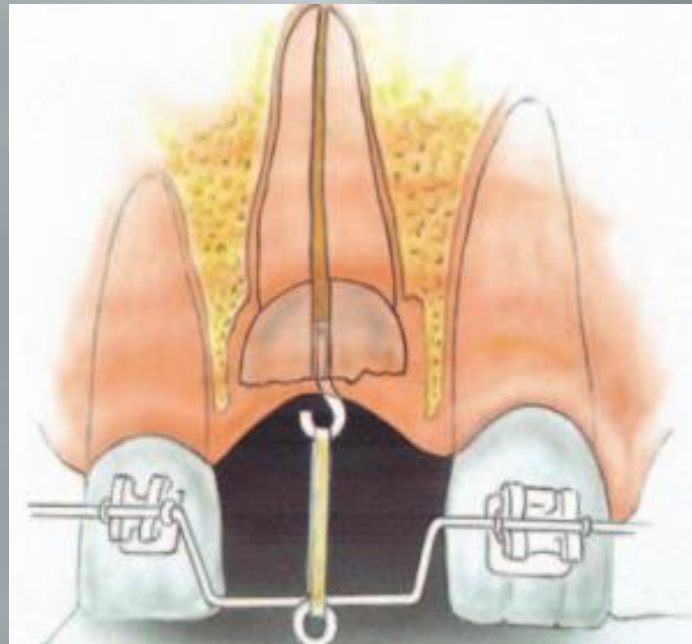
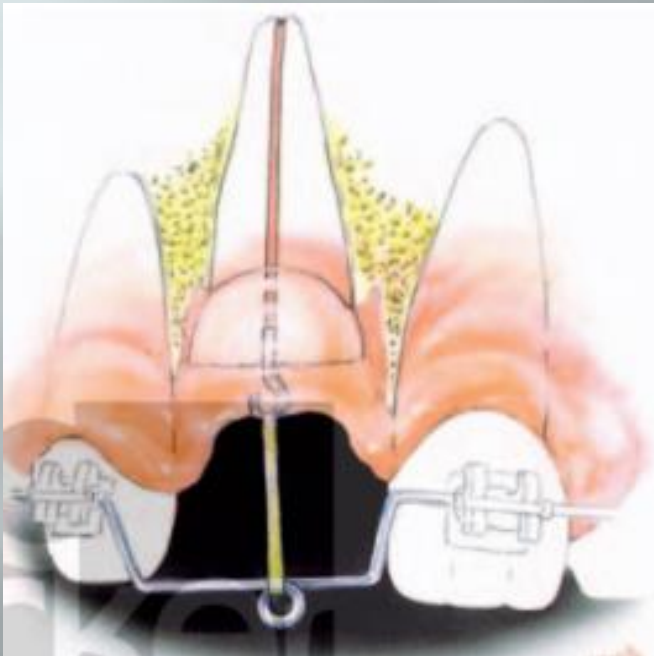






Forced Eruption

- In anterior or esthetic zones where surgical crown lengthening is unacceptable, forced eruption can serve as an alternative or adjunctive therapy





Thanks for your attention

- Carranza's Clinical Periodontology
- ATLAS OF COSMETIC AND RECONSTRUCTIVE PERIODONTAL SURGERY
- Peridontal surgery,sato

