

Restorative dentistry I.
4 th lecture

Main problems

Substantial loss of hard dental tissues

Subgingival cervical borders – difficulties with dry operative field
(bleeding, sulcular liquid)

Adhesive procedures in region without enamel
– consider selfetching adhesive

SUBGINGIVAL DEFECTS

Technical parameters:

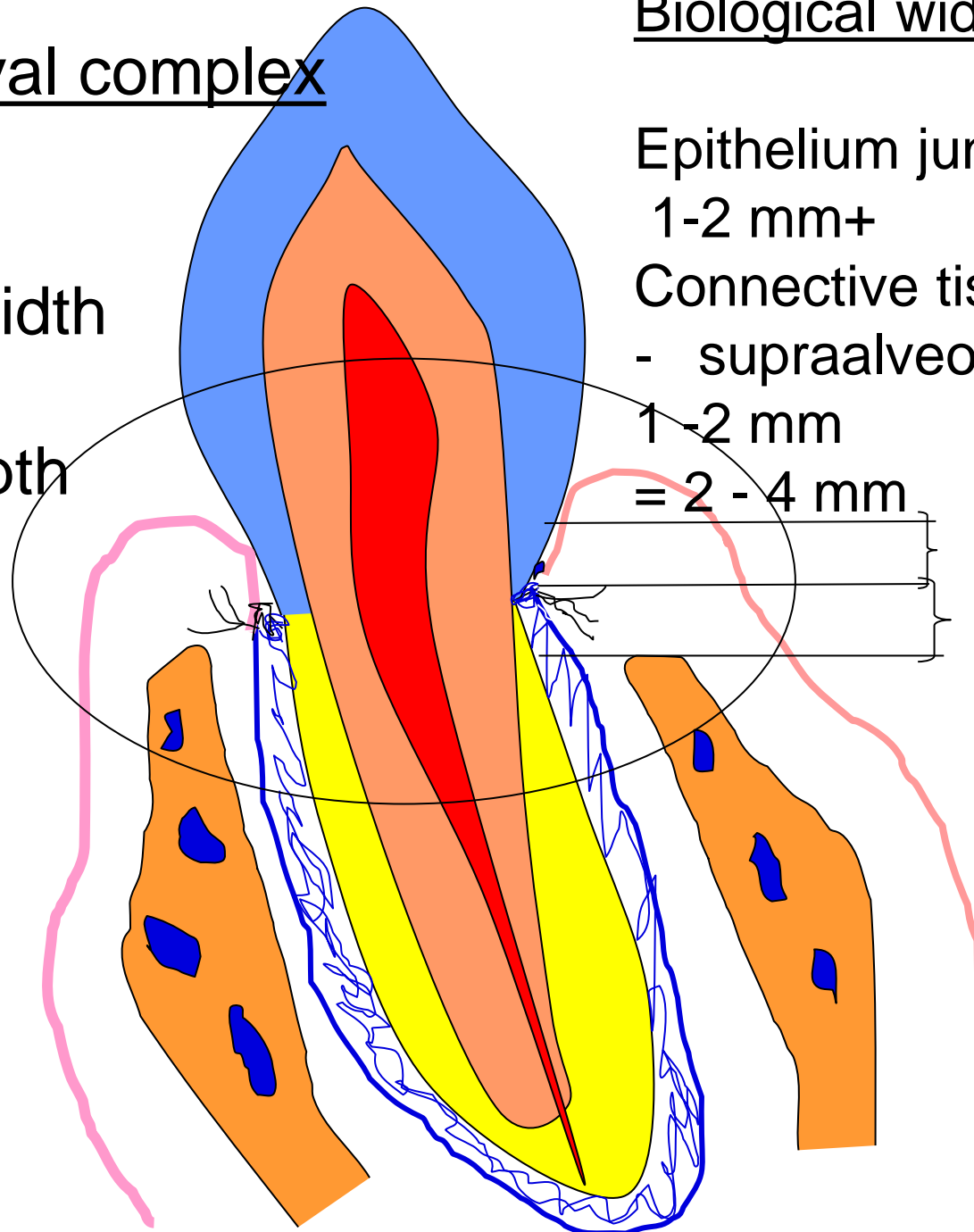
Possibility to keep the operating field dry

Biological parameters: measurement of distance between clean gingival border and insertion of periodontal ligament or crest of alveolar bone using periodontal probe and/or xray.

Biological width

Dentogingival complex

DGC =
biological width
2-4mm +
sulcular depth
1-3mm
= 3-7 mm



Biological width

Epithelium junction

1-2 mm+

Connective tissue junction

- supraalveolar fibers

1-2 mm

= 2 - 4 mm

1 - 2 mm

1- 2 mm

*Gargiulo AW, Wentz
FM, Orban B
(J Perio 1961)*

*Vacek JS, Gher ME,
Assad DA,
Richardson AC,
Gambaressi LI
(Int J Perio & Rest
Dent 1994)*

Classification of subgingival defects

1. Rubberdam is possible to use, gingival border can be seen.
2. Rubberdam does not allow complete isolation of operating field, biological width is ok.
3. Subgingival defect, biological width is affected.

Solution

1. Margin elevation – cervical margin relocation using flowable material or composite filling material
2. Gingivectomy + gingivoplasty
3. Elongation of clinical crown – crown lengthening (gingivectomy + ostectomy)

Reconstruction: direct or indirect

Cervical margin relocation

SEQUENCE OF OPERATION – MARGIN RELOCATION •

Consider possibility of effect of rubberdam and biological width •

Cervical margin relocation

Application of rubberdam

Matrix band – can be cut (appr.3 - 5 mm)

Tightening of the matrix with the retainer

Insertion of a wooden wedge

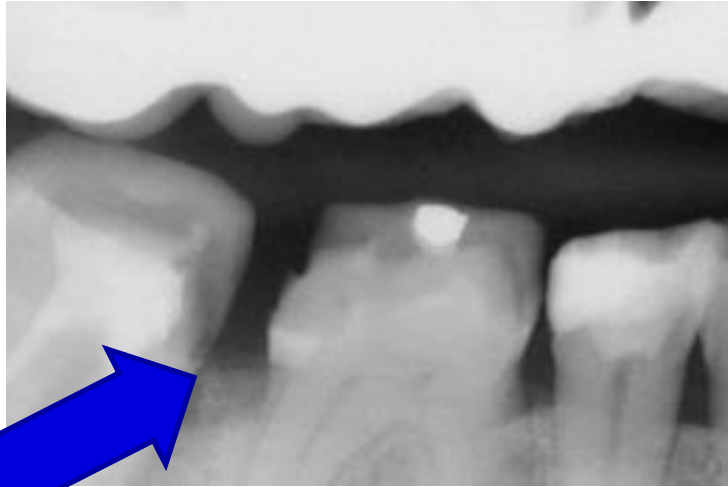
Adhesive procedure consider selfetching adhesive system

Flowable

Composite

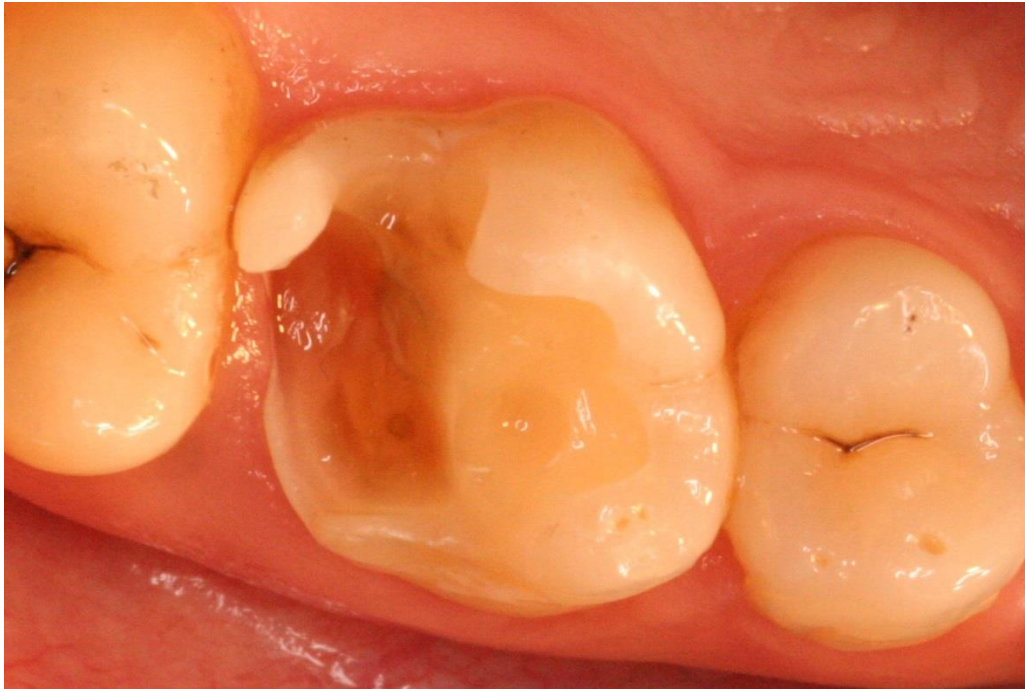






New margin



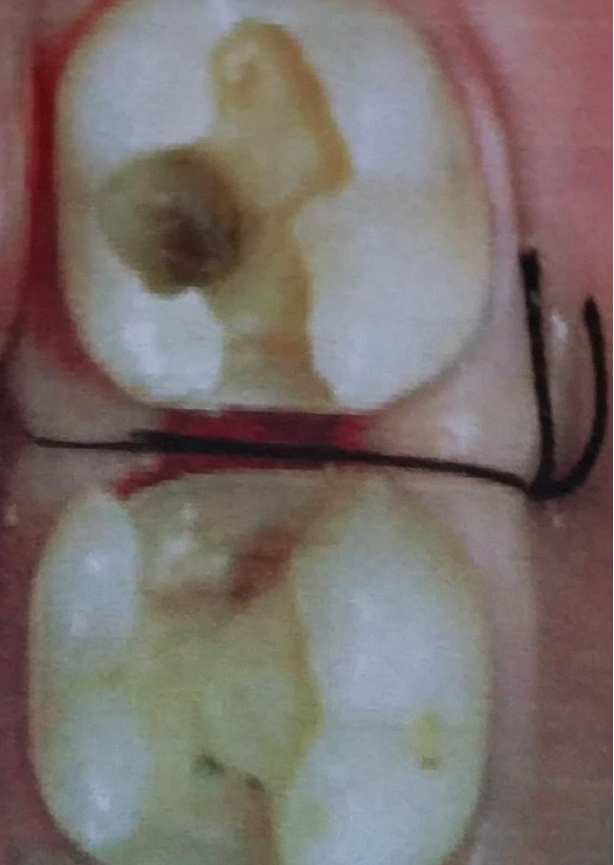




Gingivectomy and gingivoplasty

Cutting gingiva and shaping it anatomically :

Scalpel - Laser - Cauter



Crown lengthening

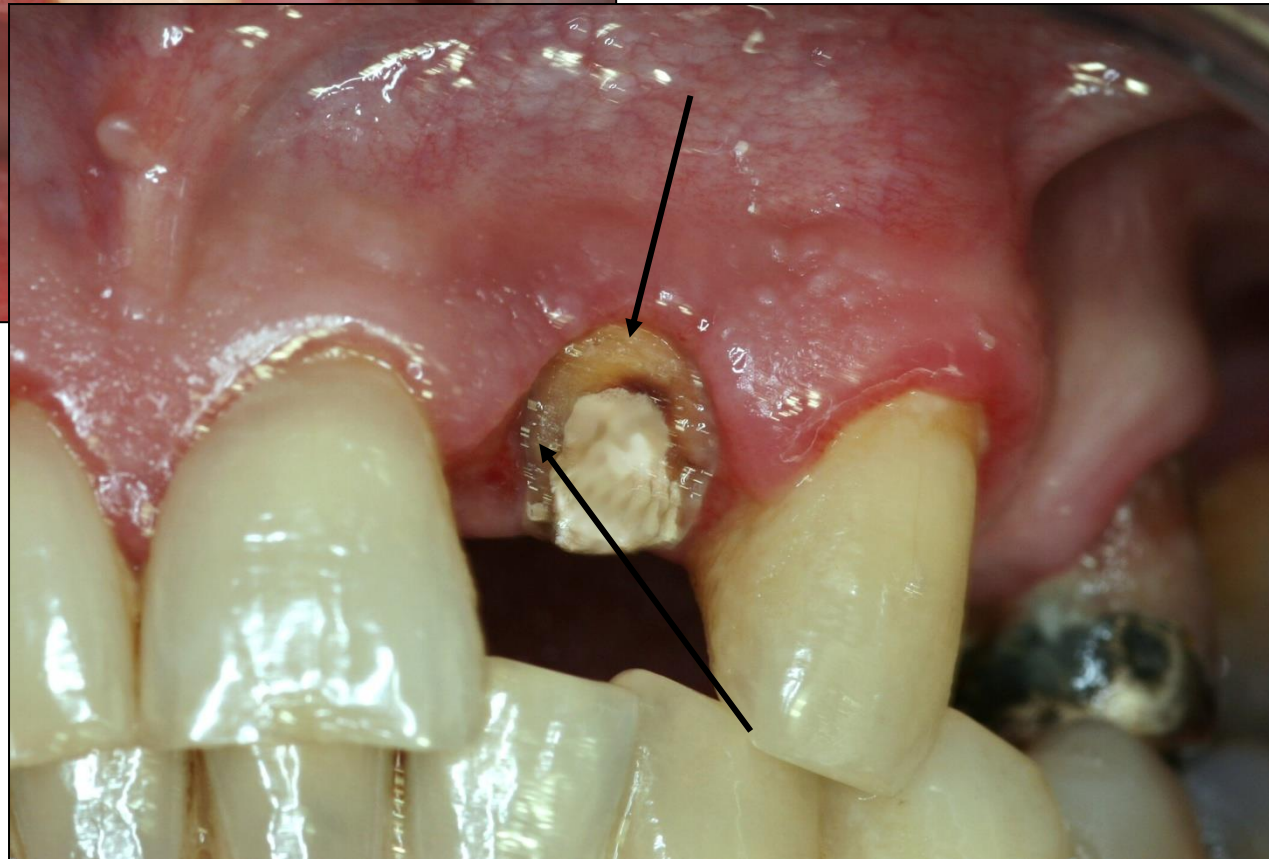
Surgical procedure based on gingivectomy, gingivoplasty and ostectomy.

Closed and open









Gingivectomy
Gingivoplasty

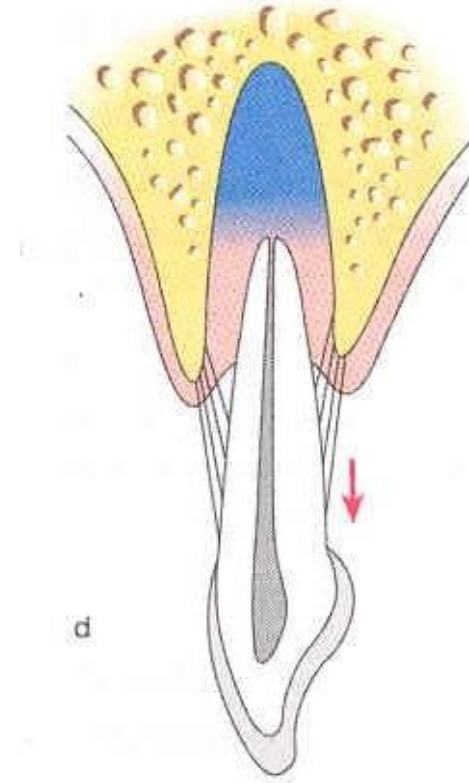


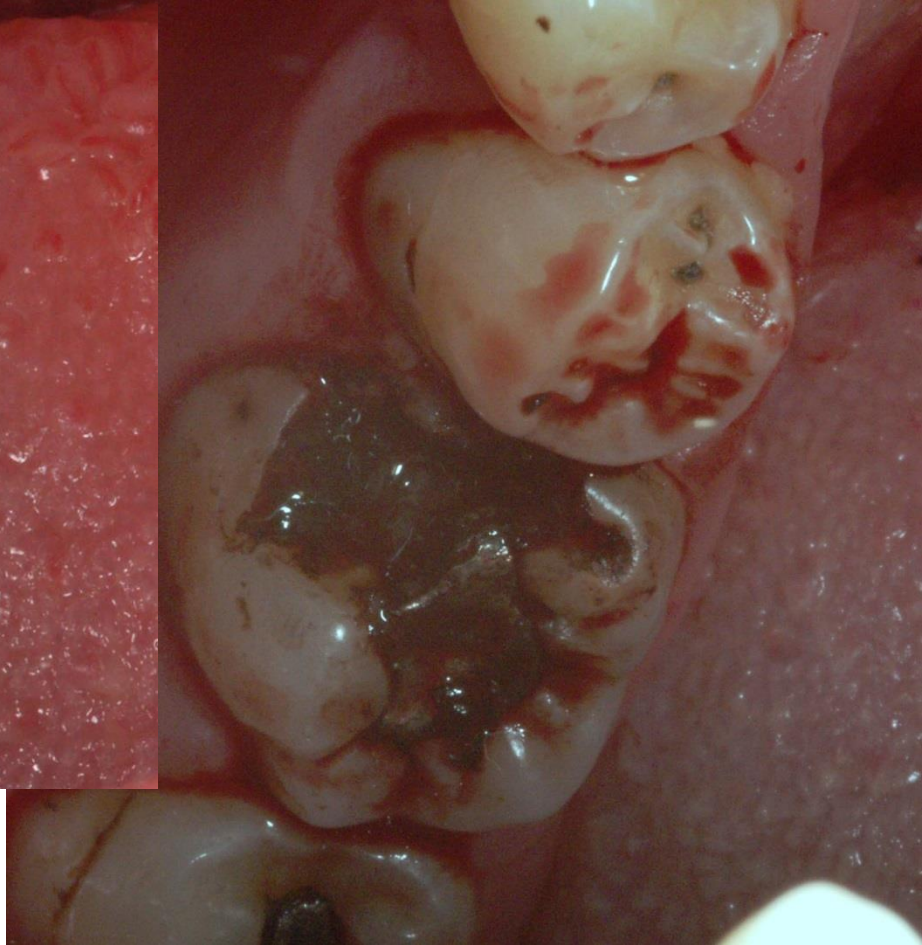
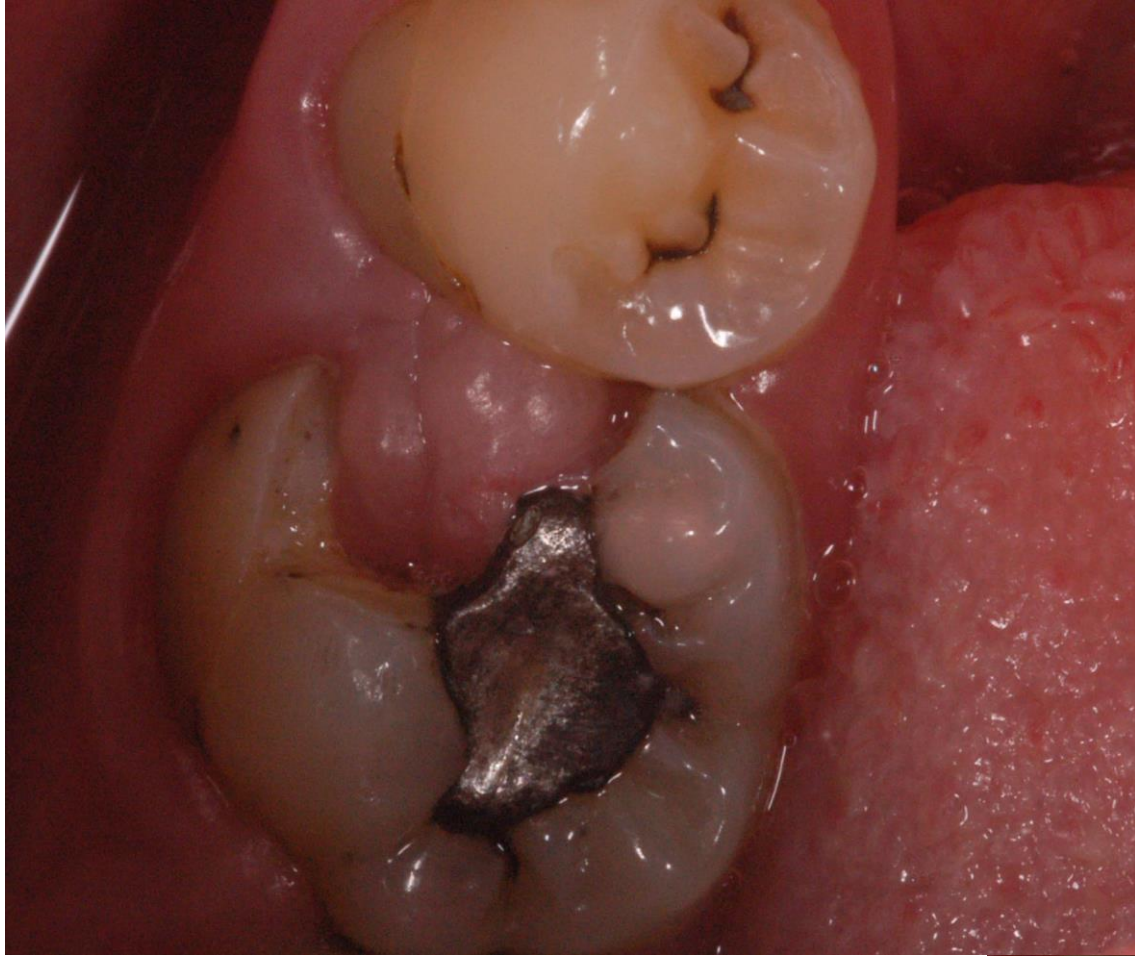
GIC as a temporary



Extrusion

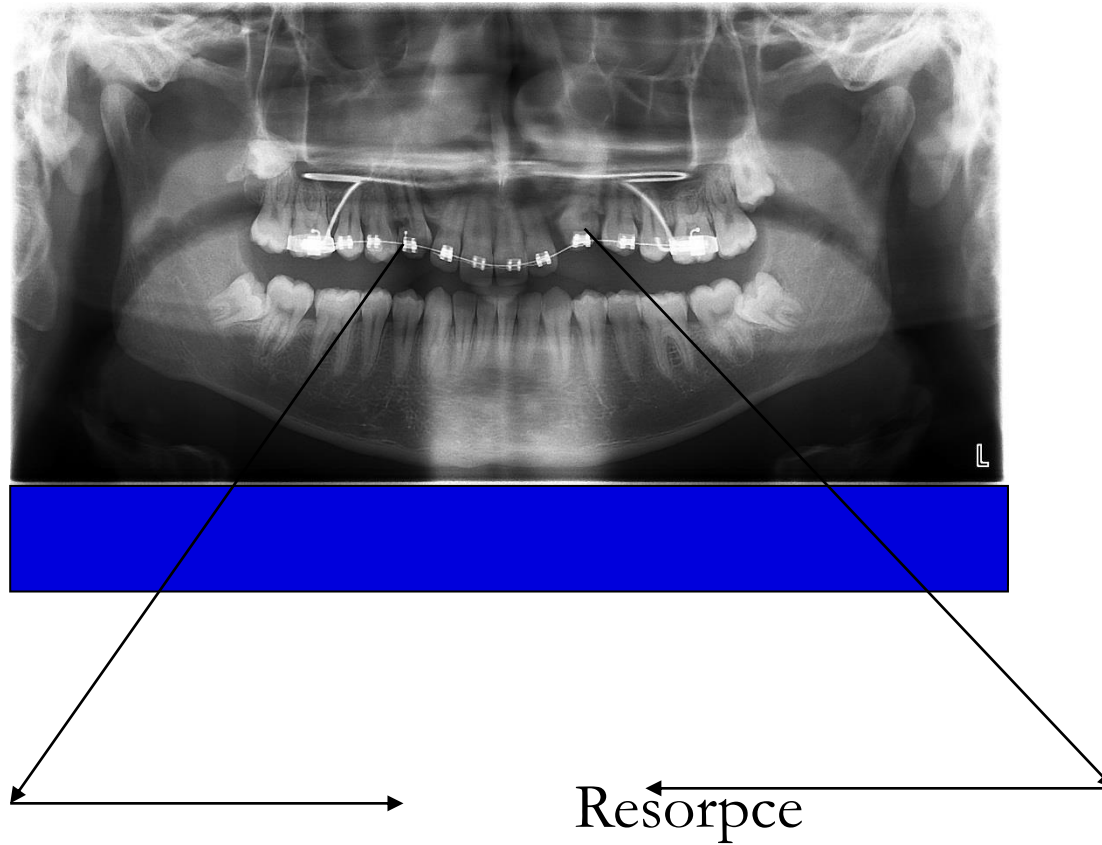
- Extrusion orthodontic
- Fast
- Surgical

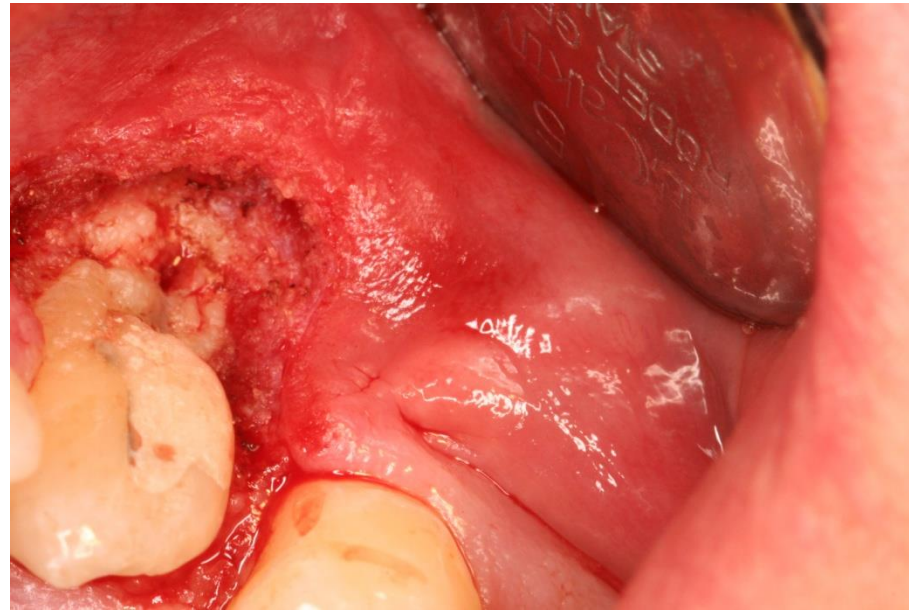


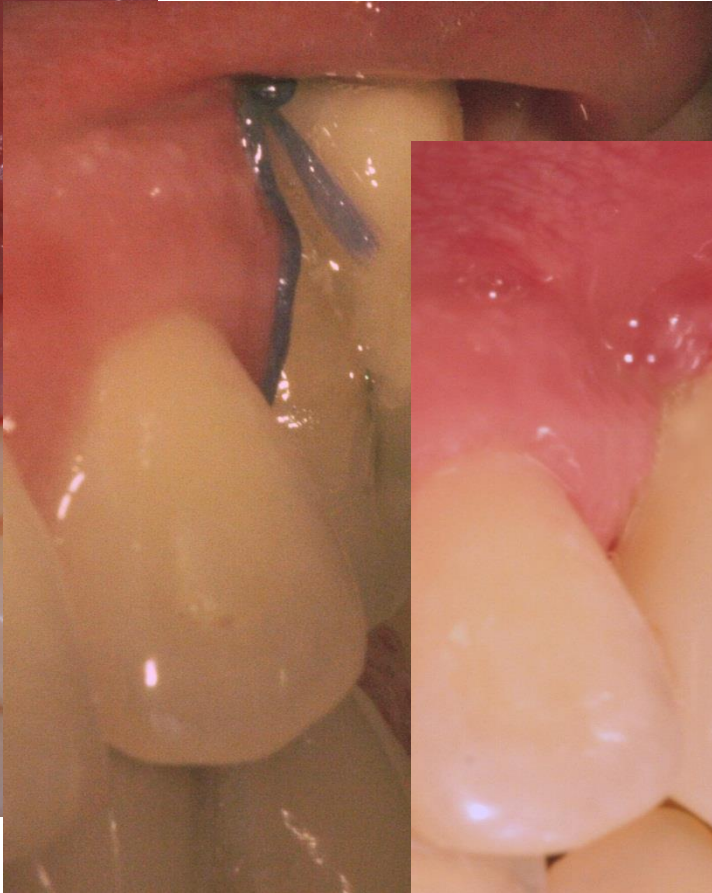
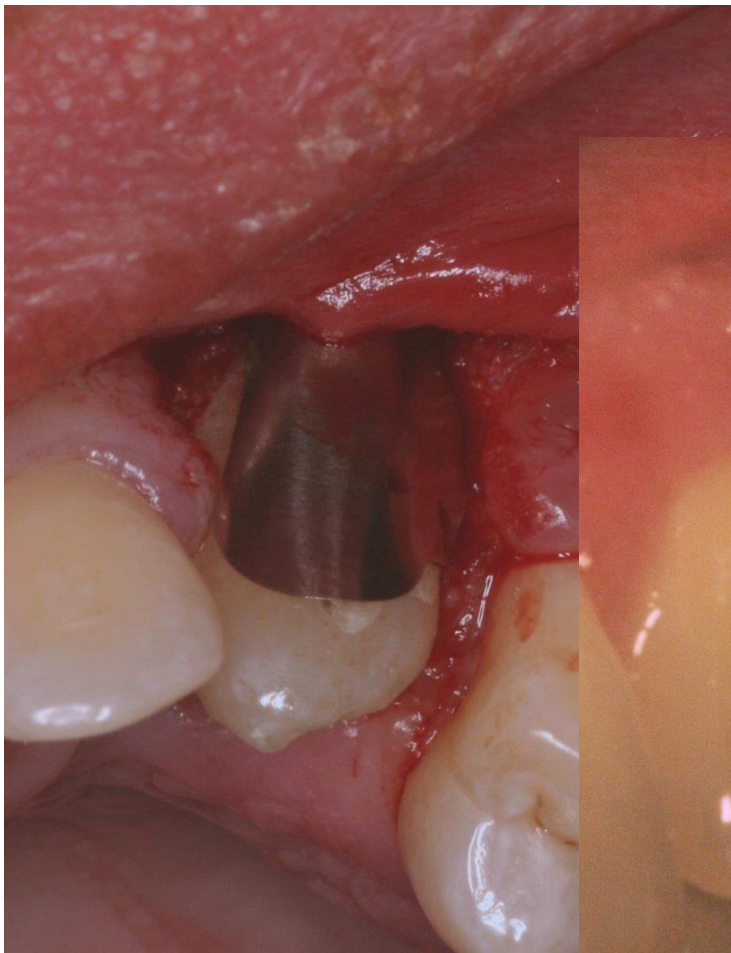


M U N I
M E D











The story continues....