Basic preprosthetic oral surgery

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Preprosthetic surgery =

Surgical correction of soft and hard tissue anomalies, which may negatively influence the fuction and aesthetics of conventional prosthesises

Objectives

- To provide a proper jaw interrelation in vertical, transverse and antero posterior directions
- To have proper configuration of alveolar processes
- To have adequate attached keratinized gingiva
- To have sufficient vestibular depth
- No bony or soft tissue protuberances or undercuts

Common preprosthetic surgical interventions

1. Soft tissue corrections

- removal of excessive freni
- removal of denture hyperplasia
- vestibuloplasty
- reduction of maxillary tuberosity

2. Bone corrections

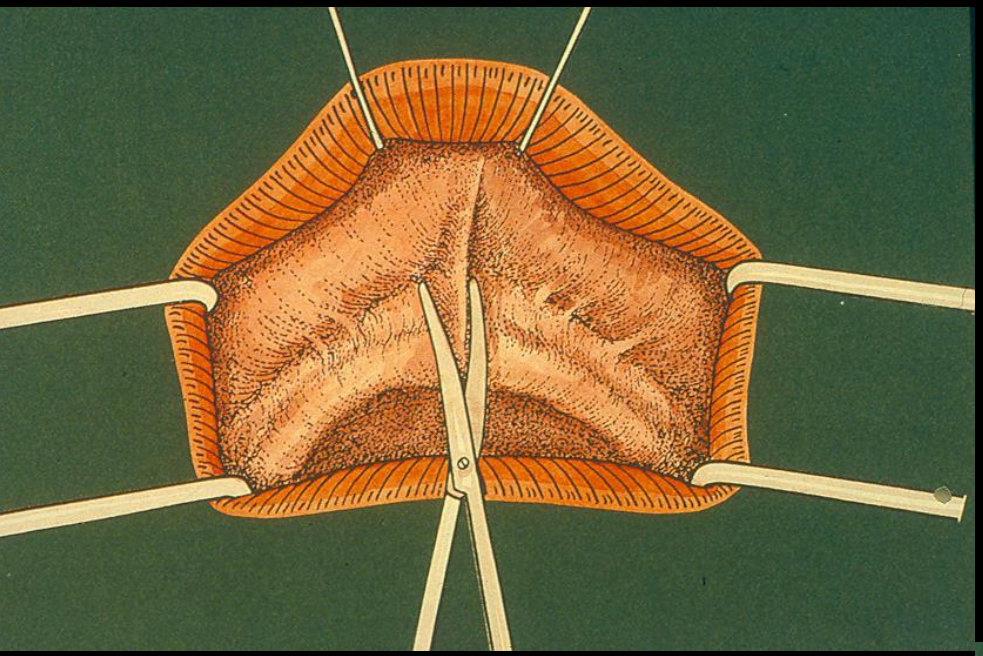
- treatment after extraction of teeth
- removal of exostoses
- bone grafting for aesthetic purposes

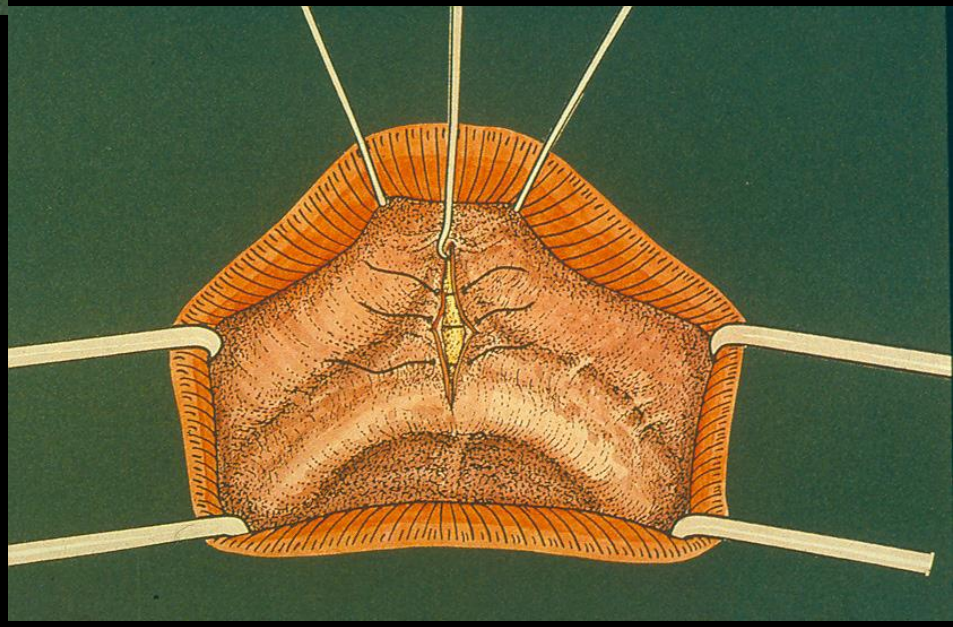
Common preprosthetic surgical interventions

1. **Soft tissue corrections**

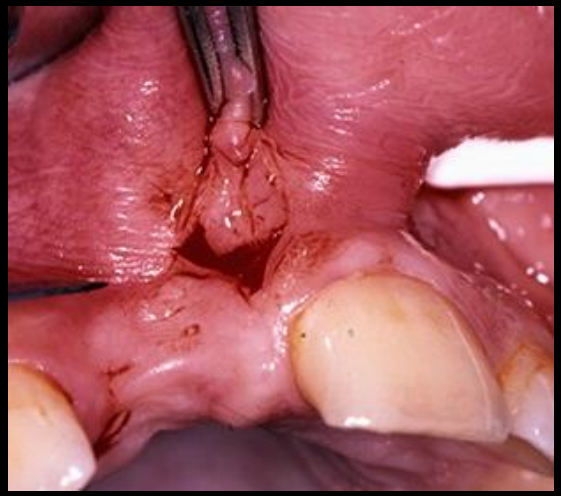
- **removal of excessive freni**

Frenulectomy with excision

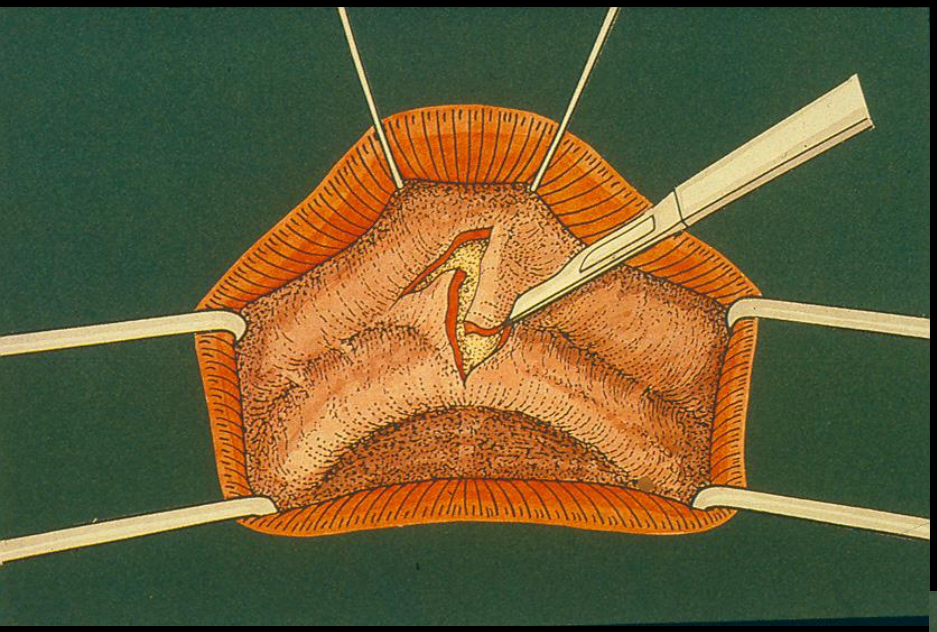


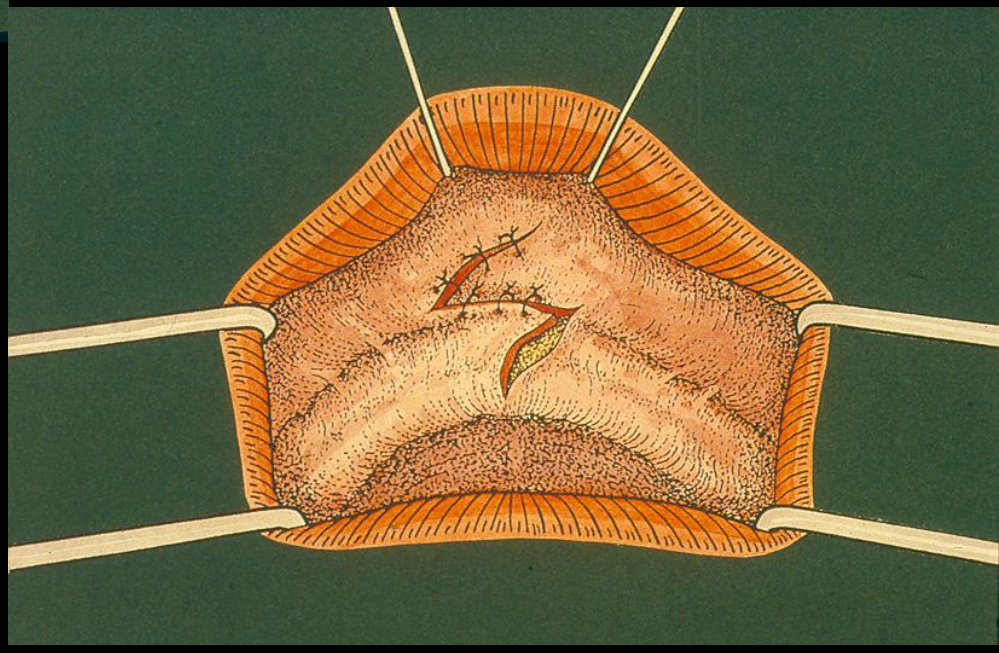


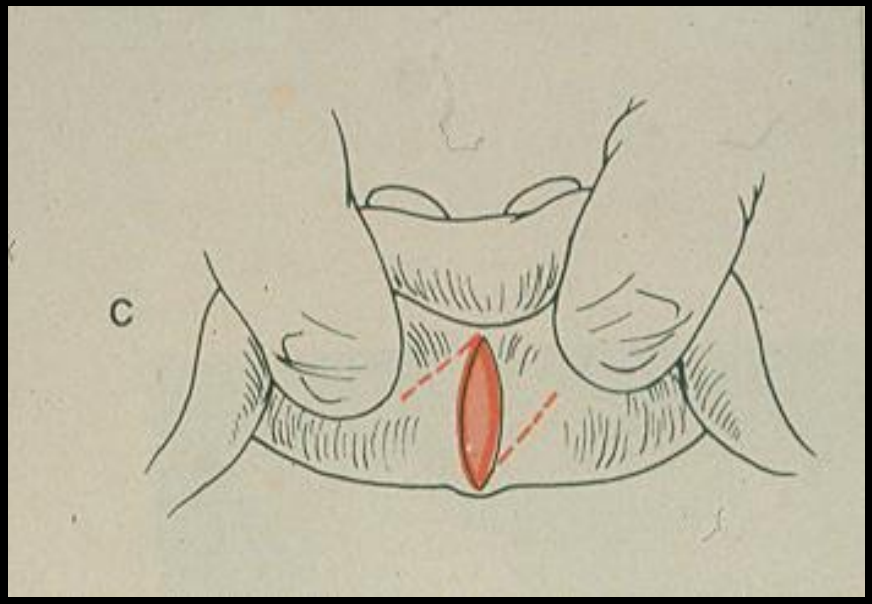
Frenulectomy



Frenulectomy with Z-plastic surgery



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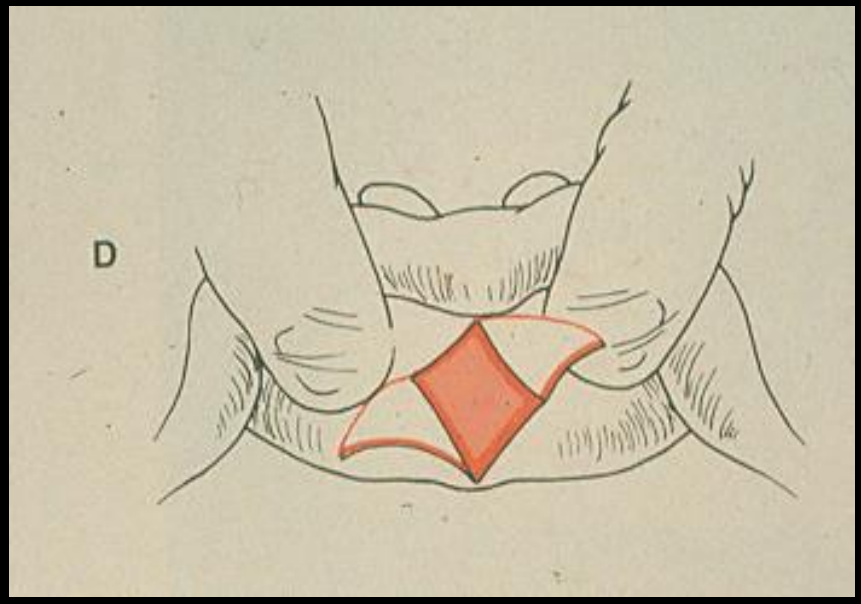
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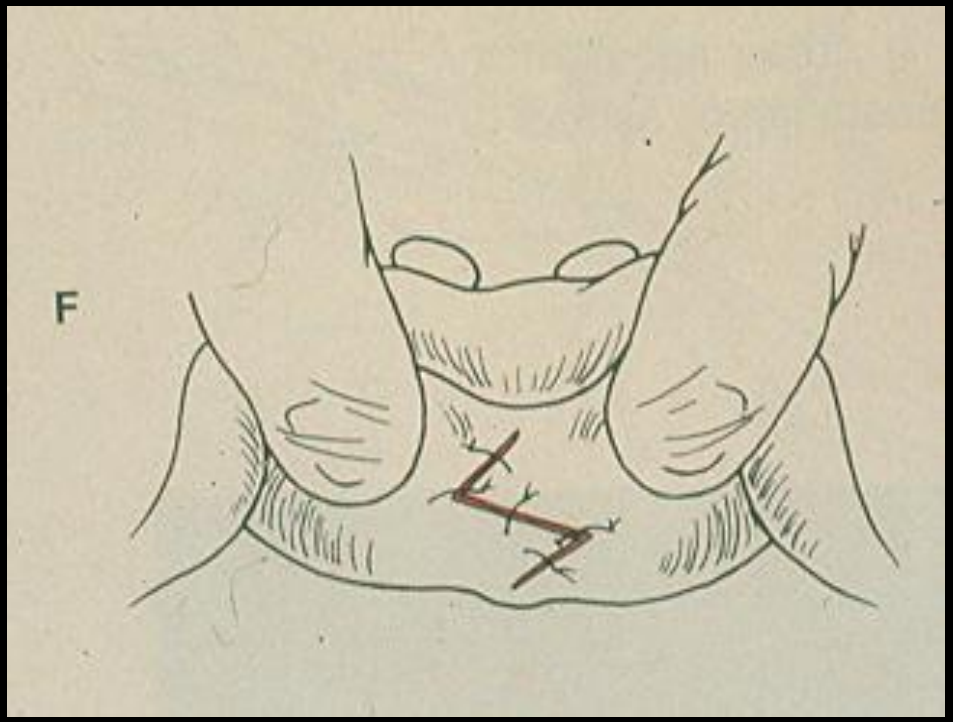
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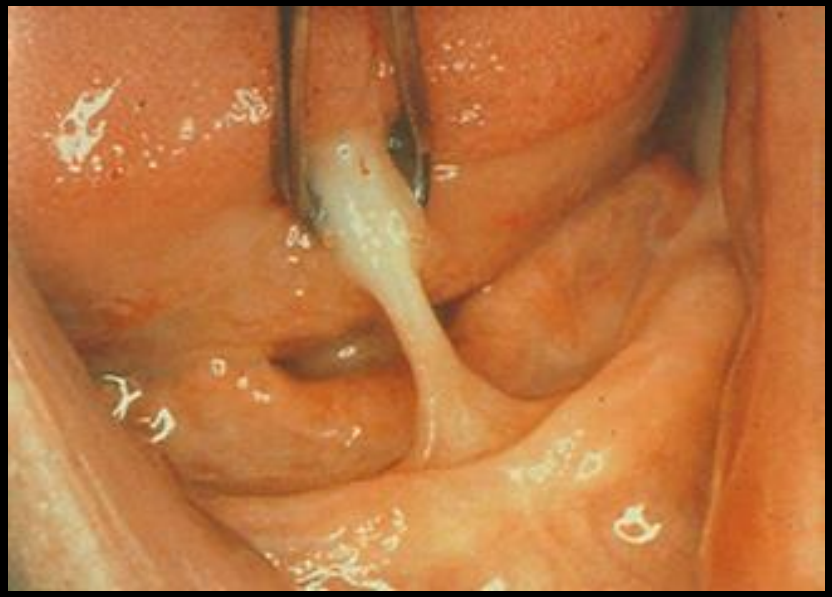
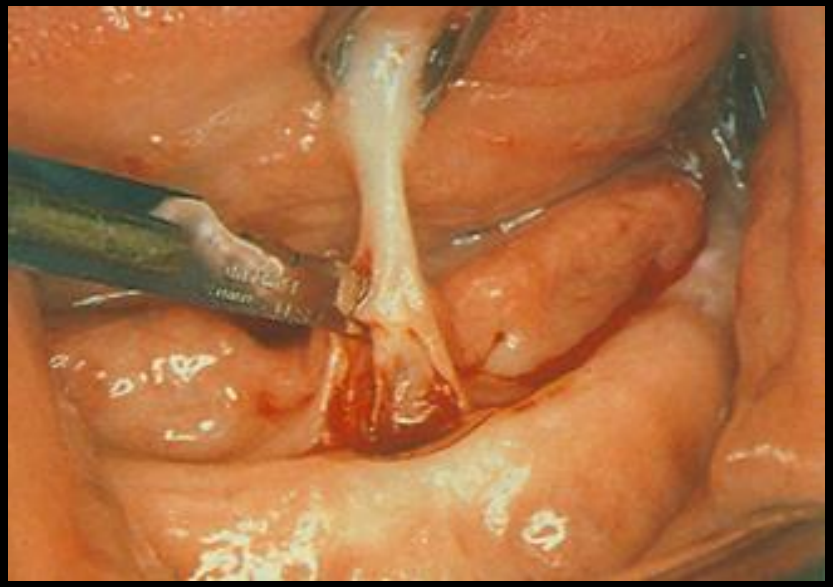
Frenulectomy with Z-flaps

Excessive lingual frenum



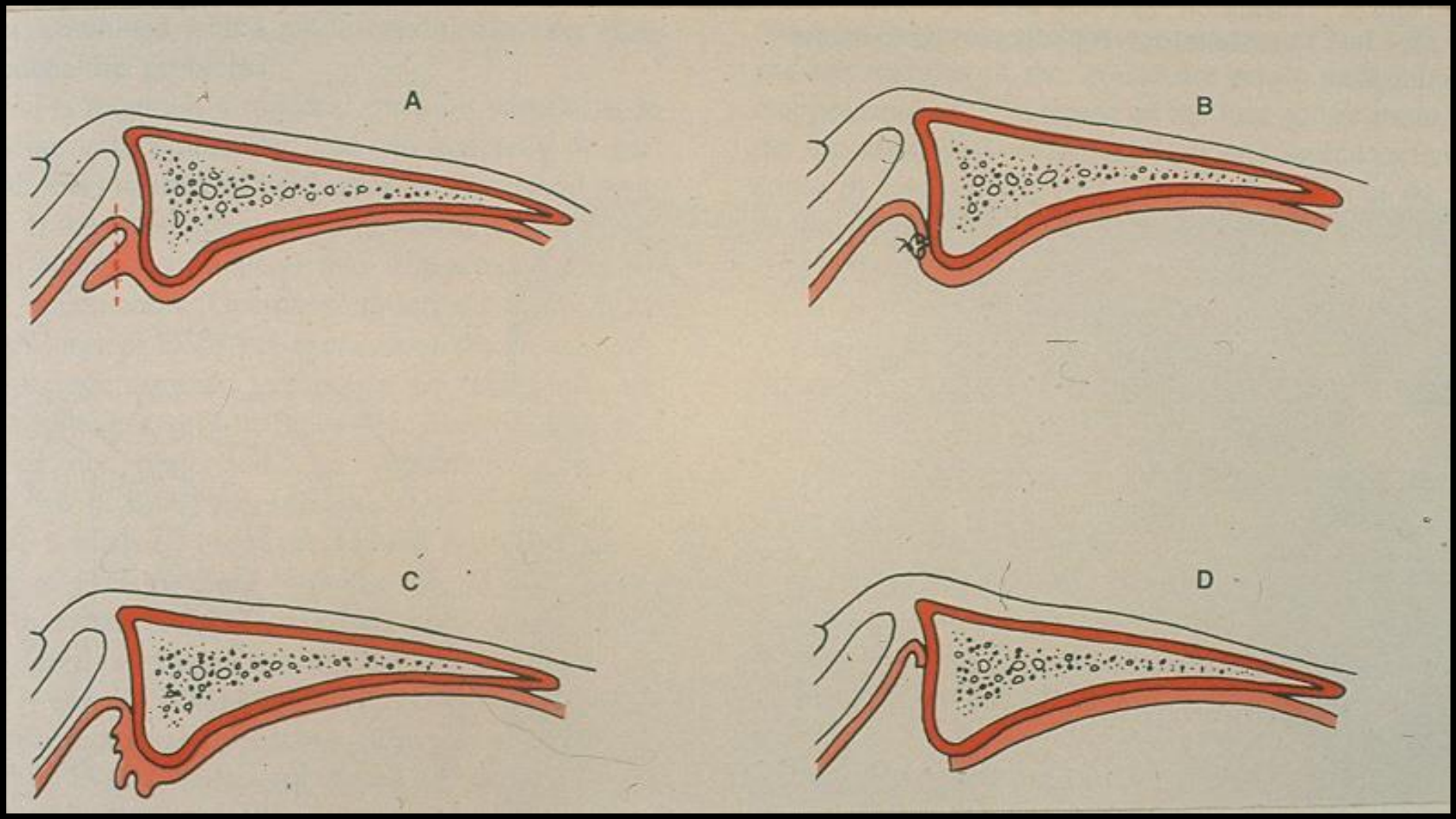


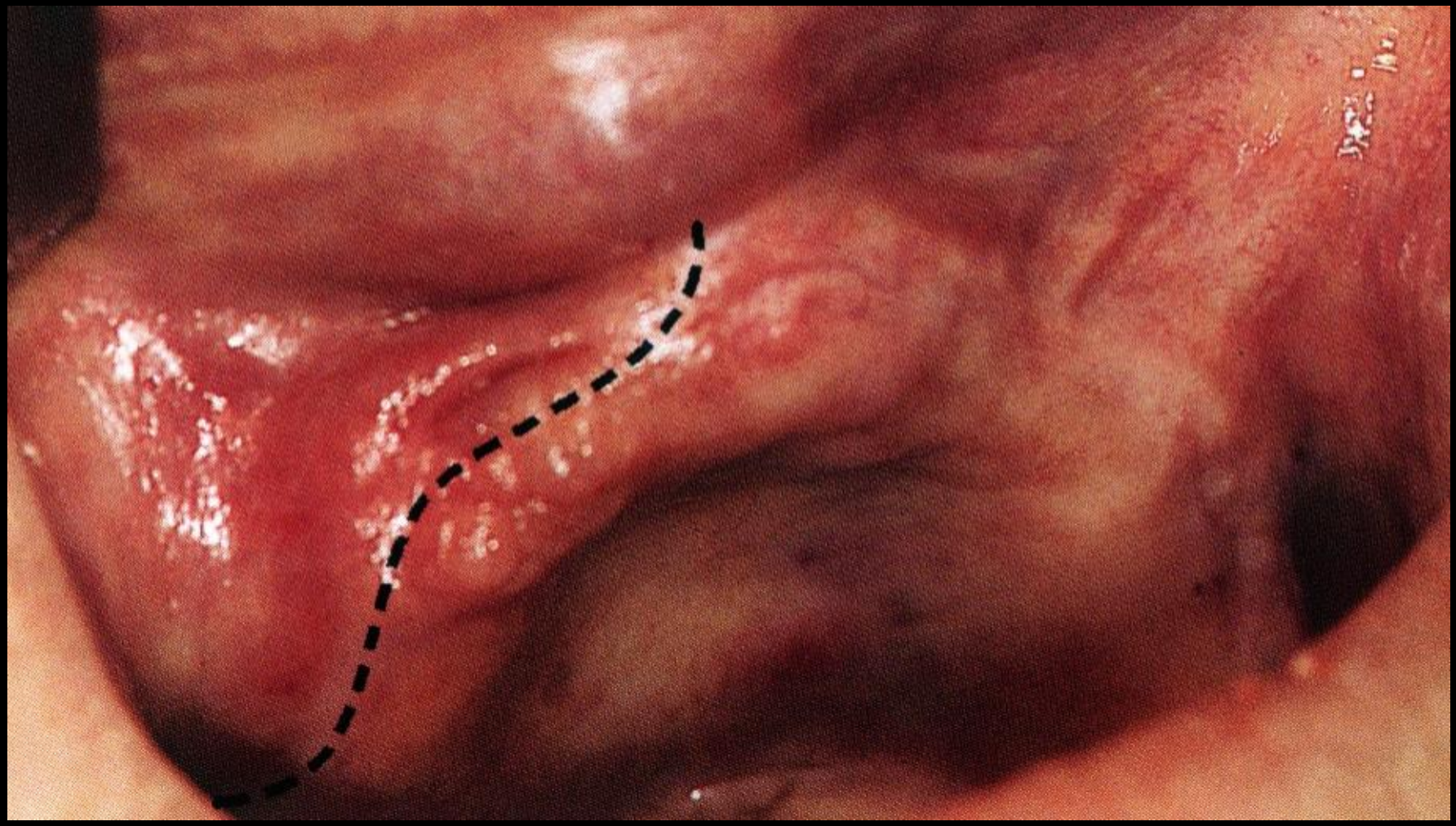
Common preprosthetic surgical interventions

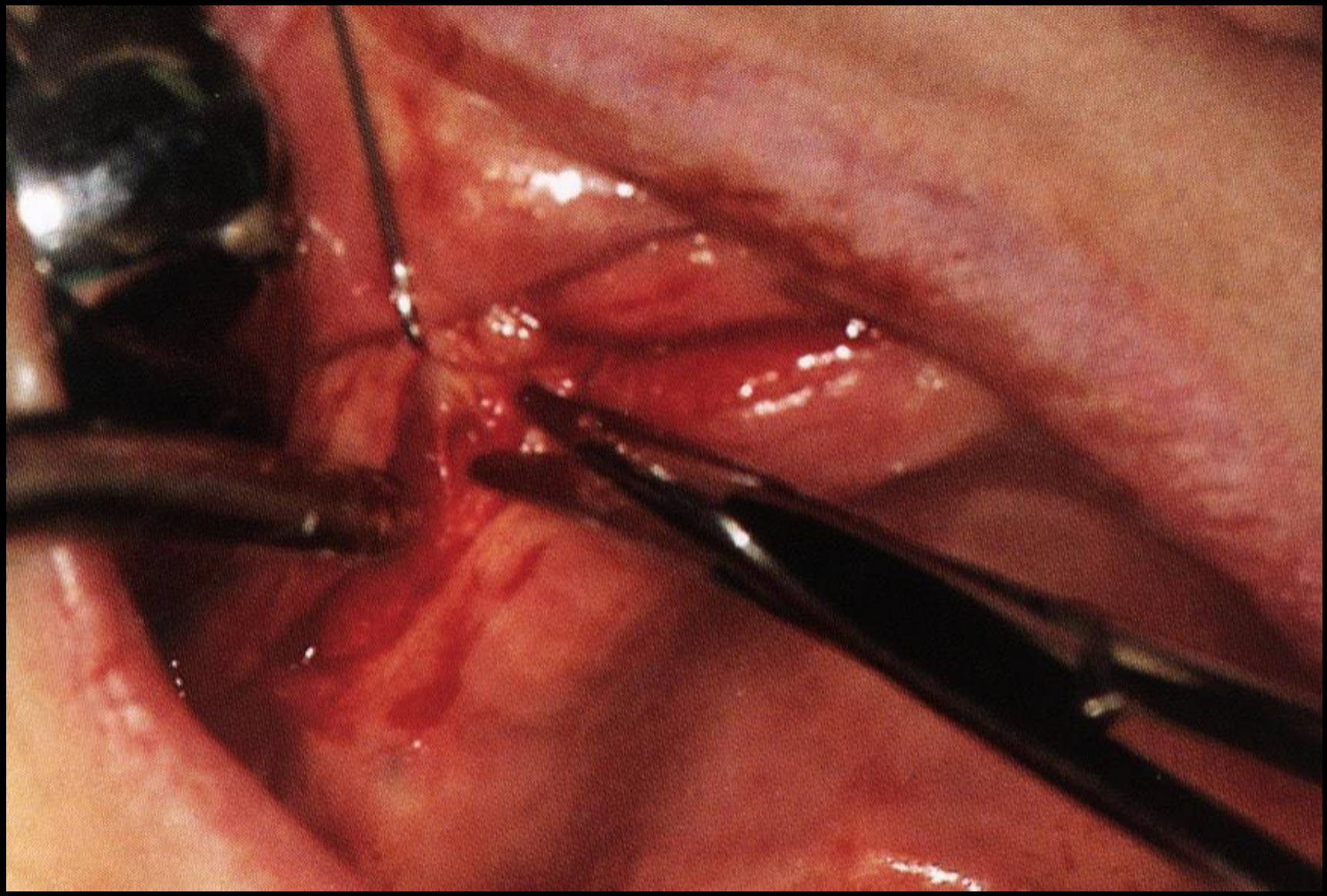
1. **Soft tissue corrections**
   - **removal of excessive freni**
   - **removal of denture hyperplasia**

Removal of denture hyperplasia

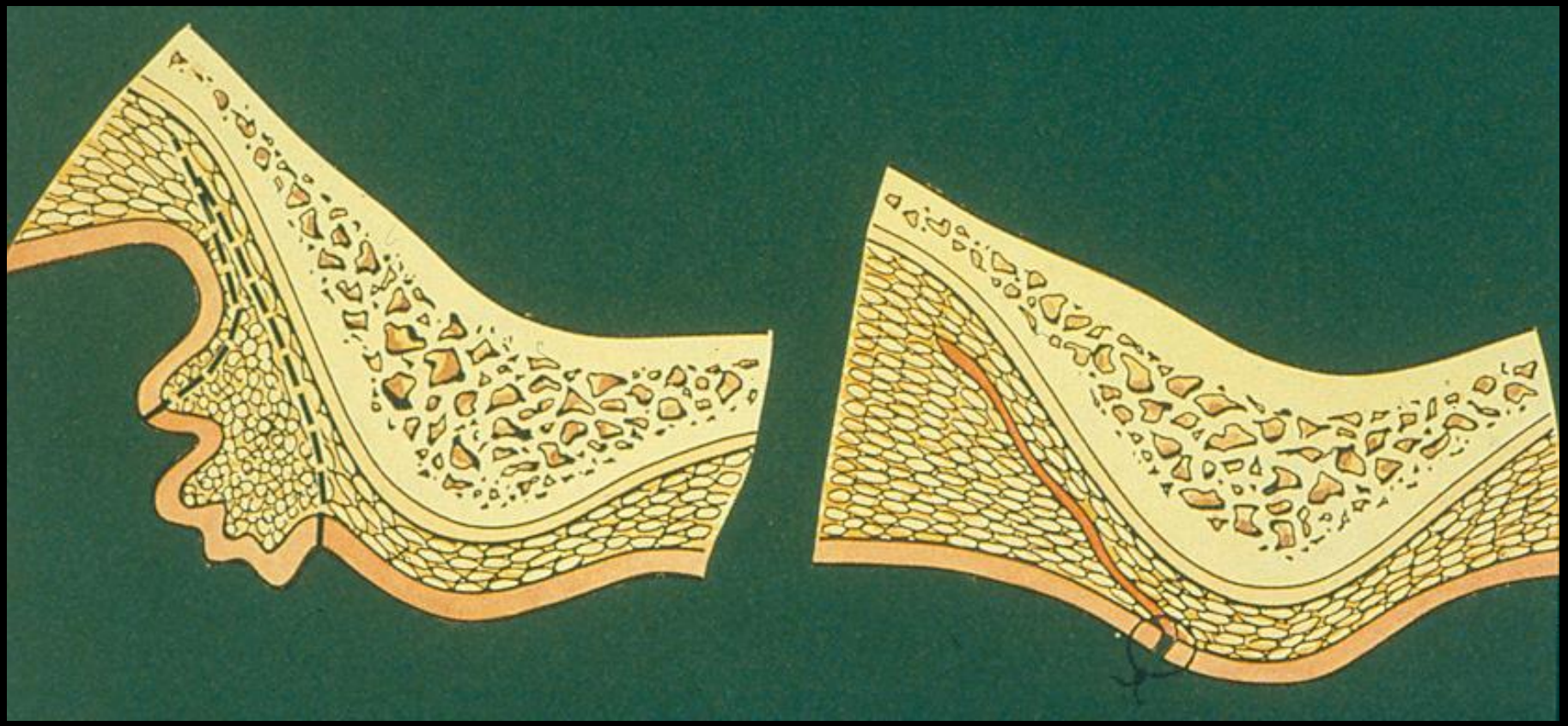
A-B = healing per primam





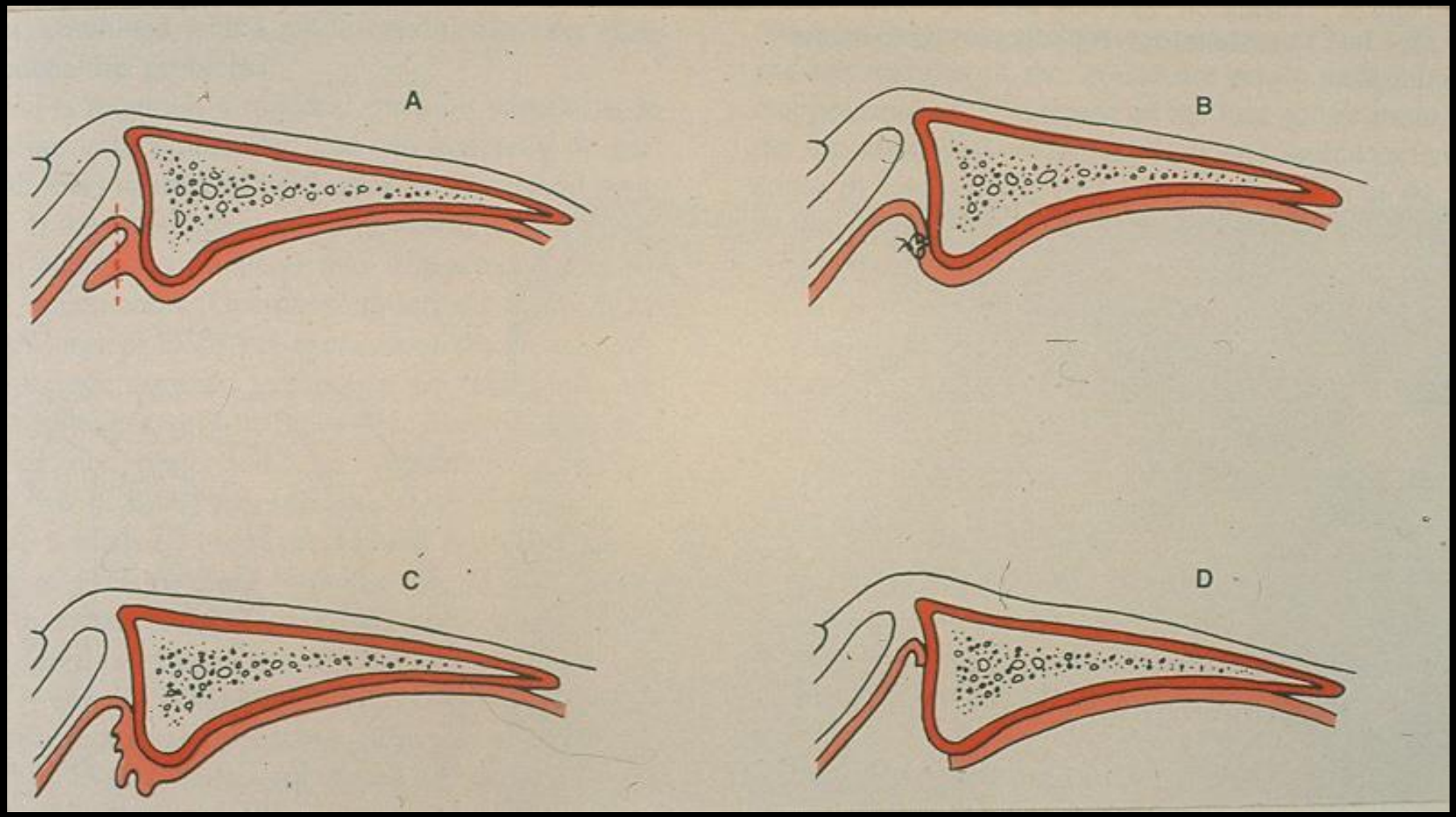


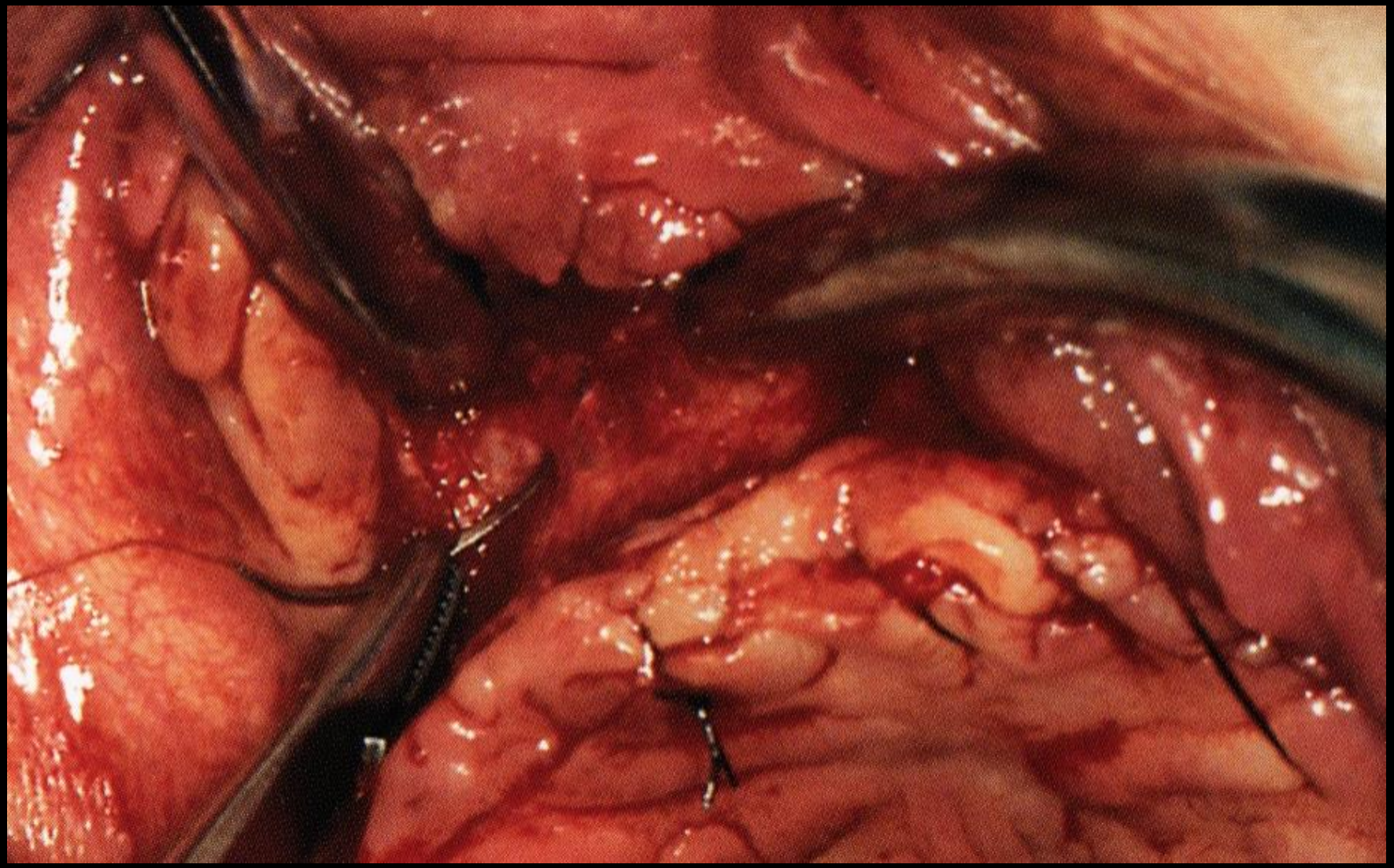
Excision of denture hyperplasia with elongation of mucosa

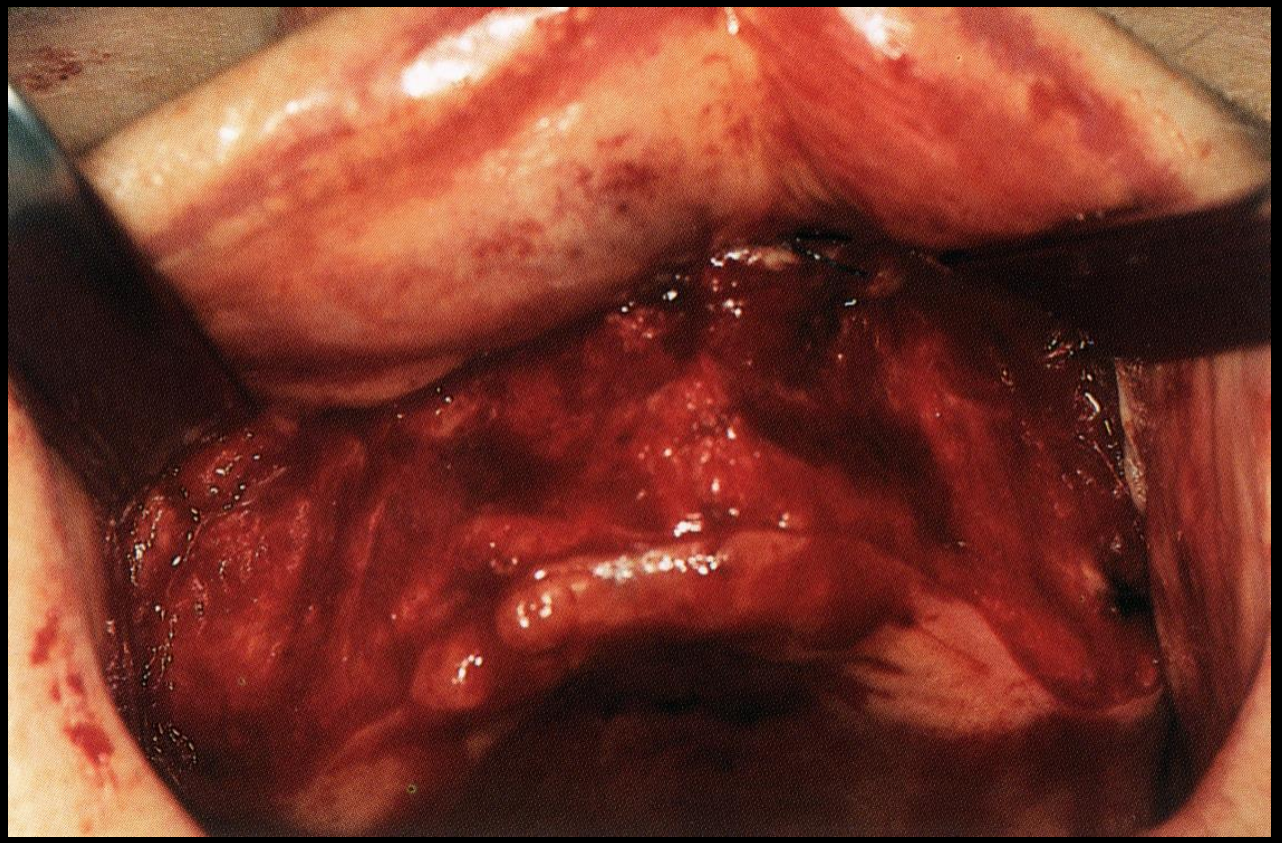


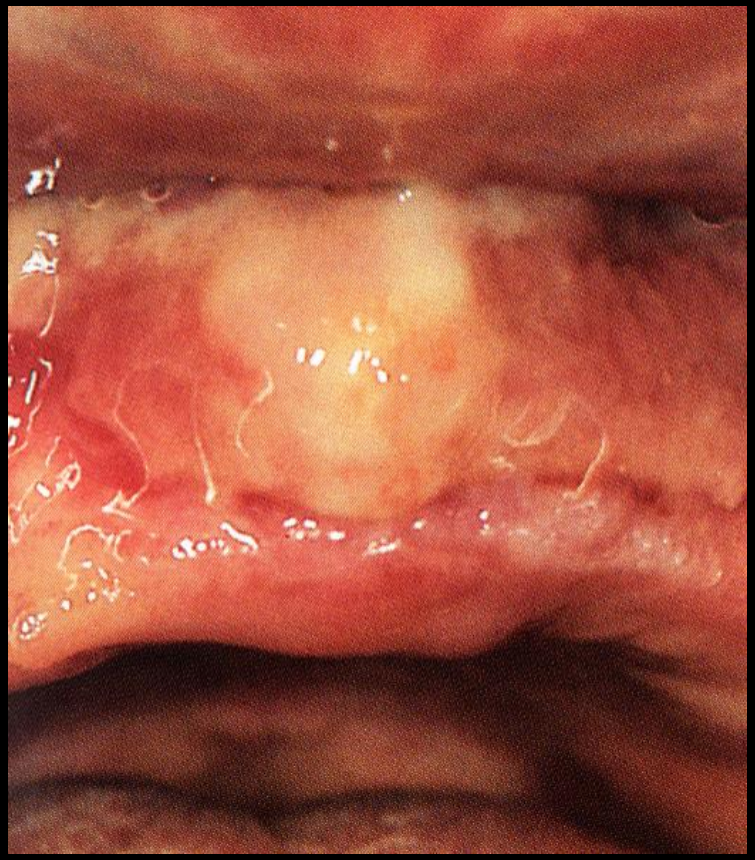
Removal of denture hyperplasia

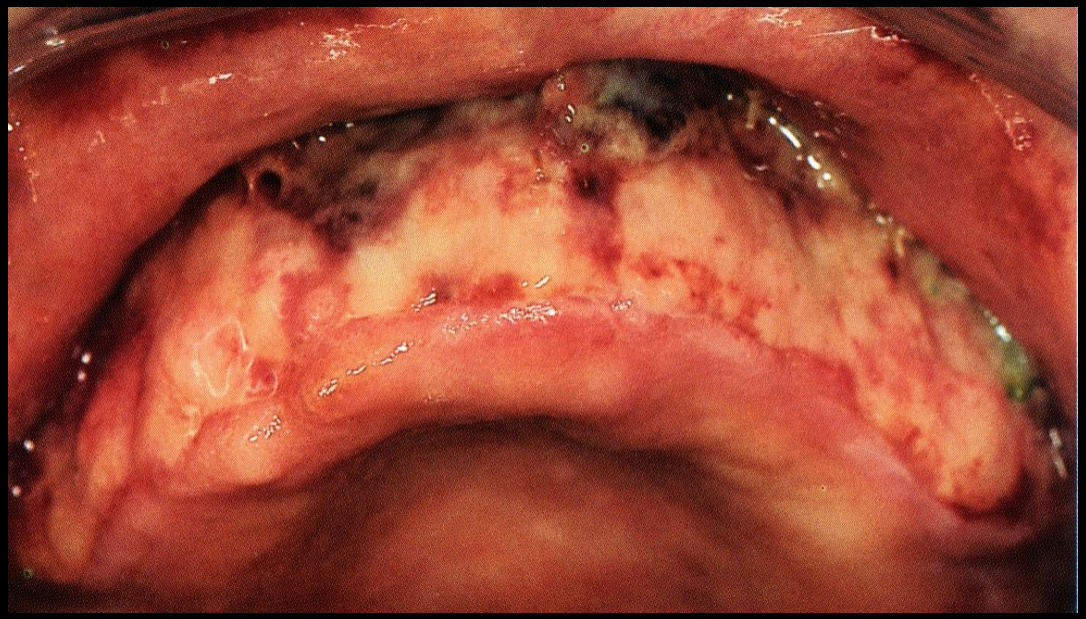
C-D = healing per secundam

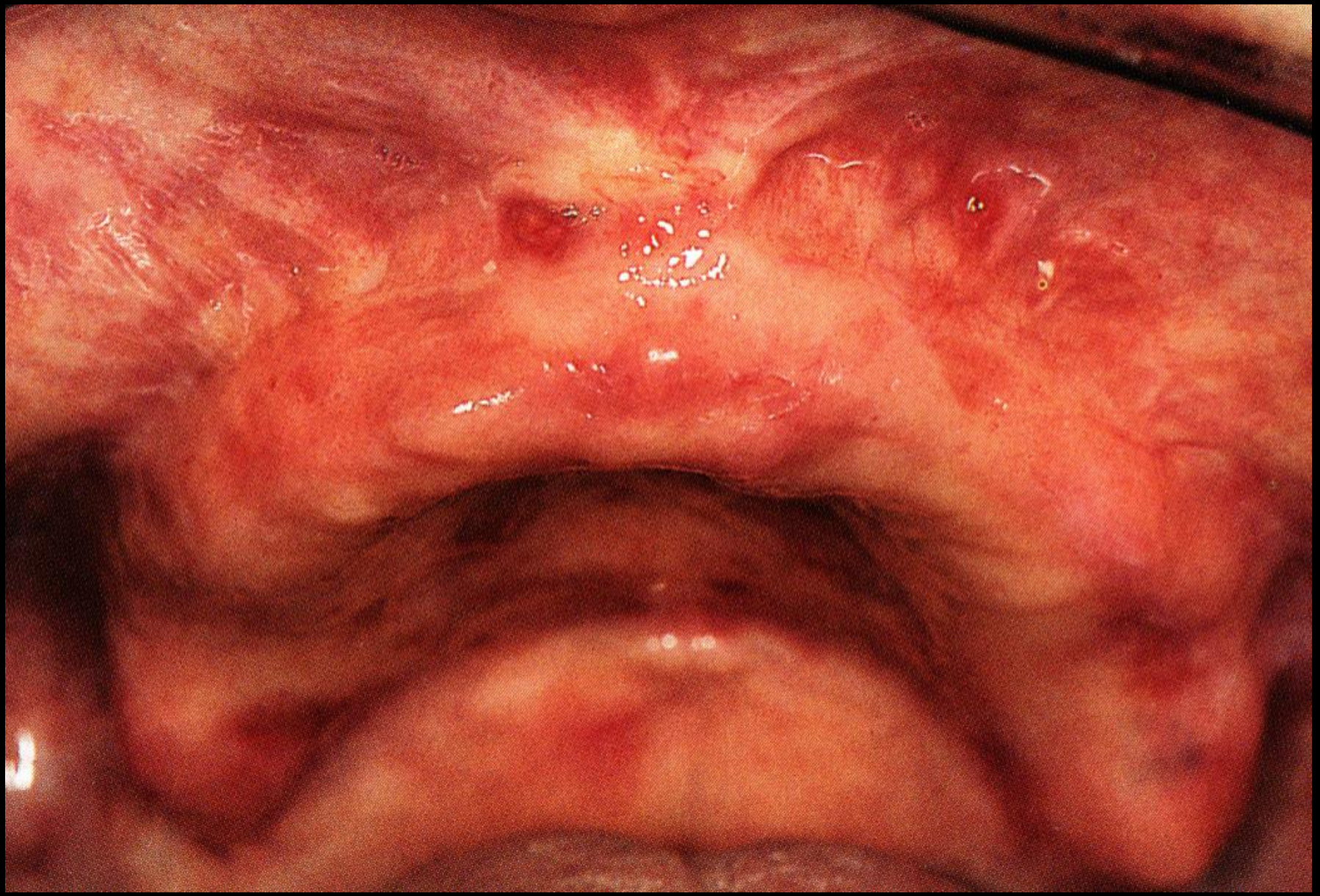




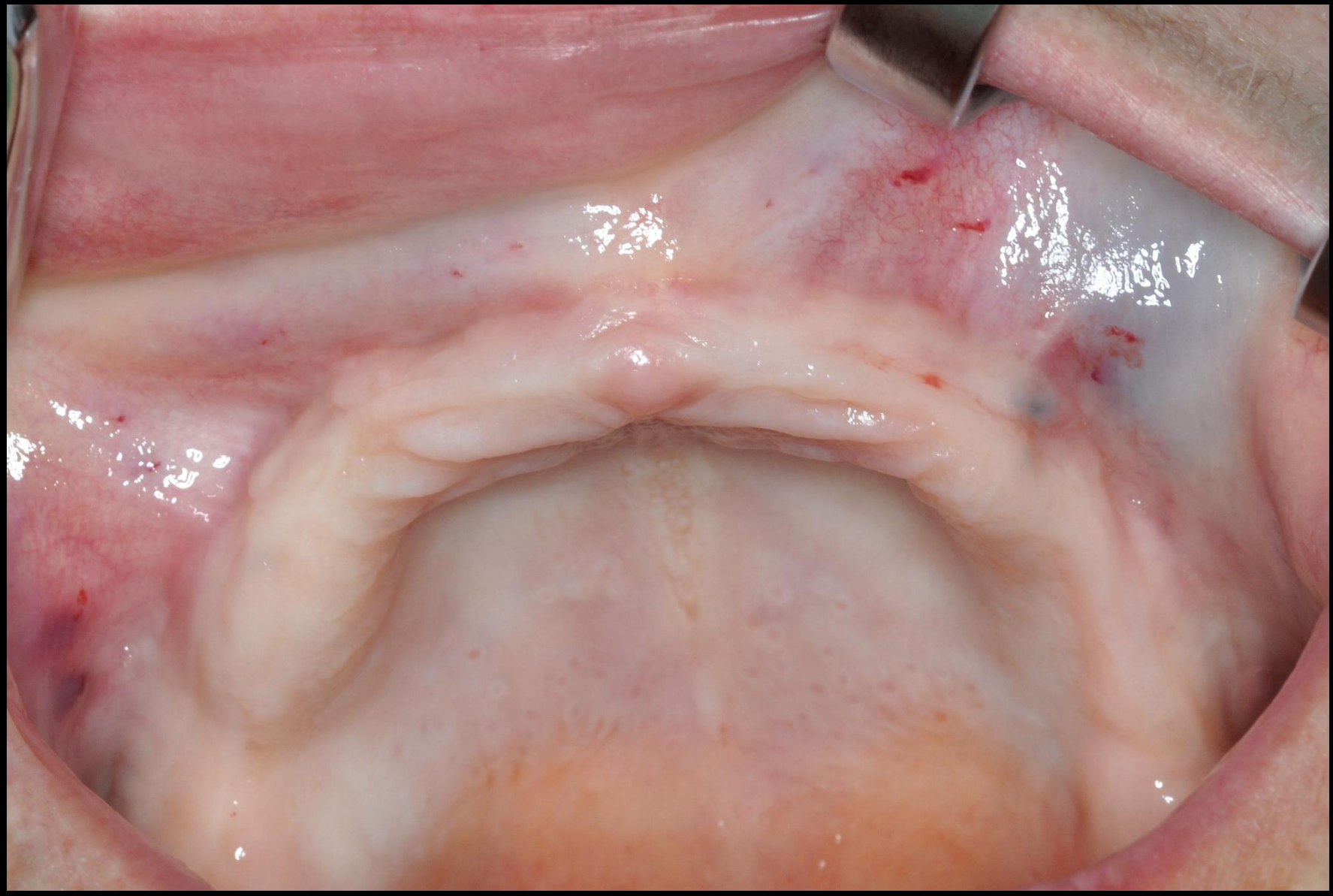


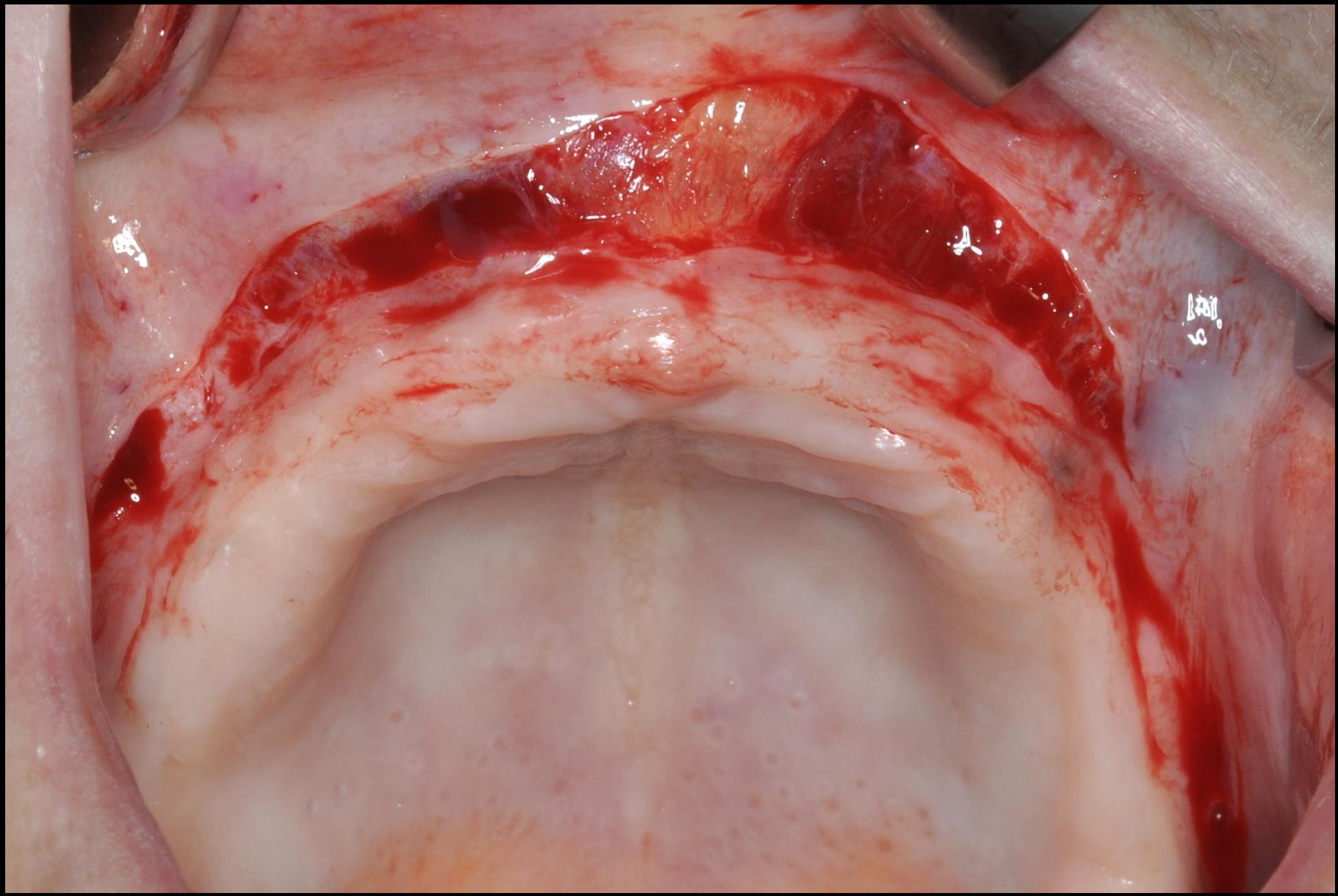


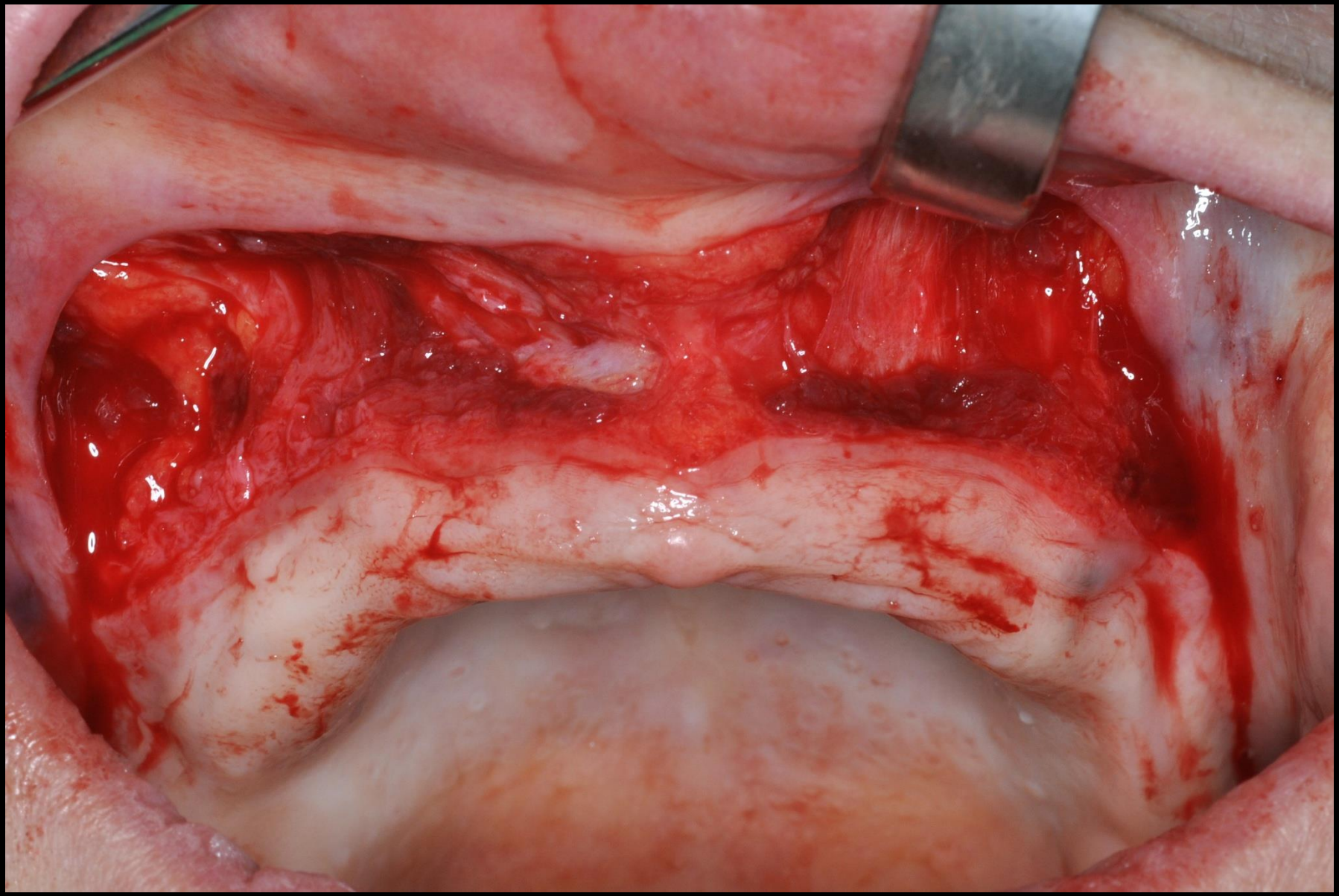


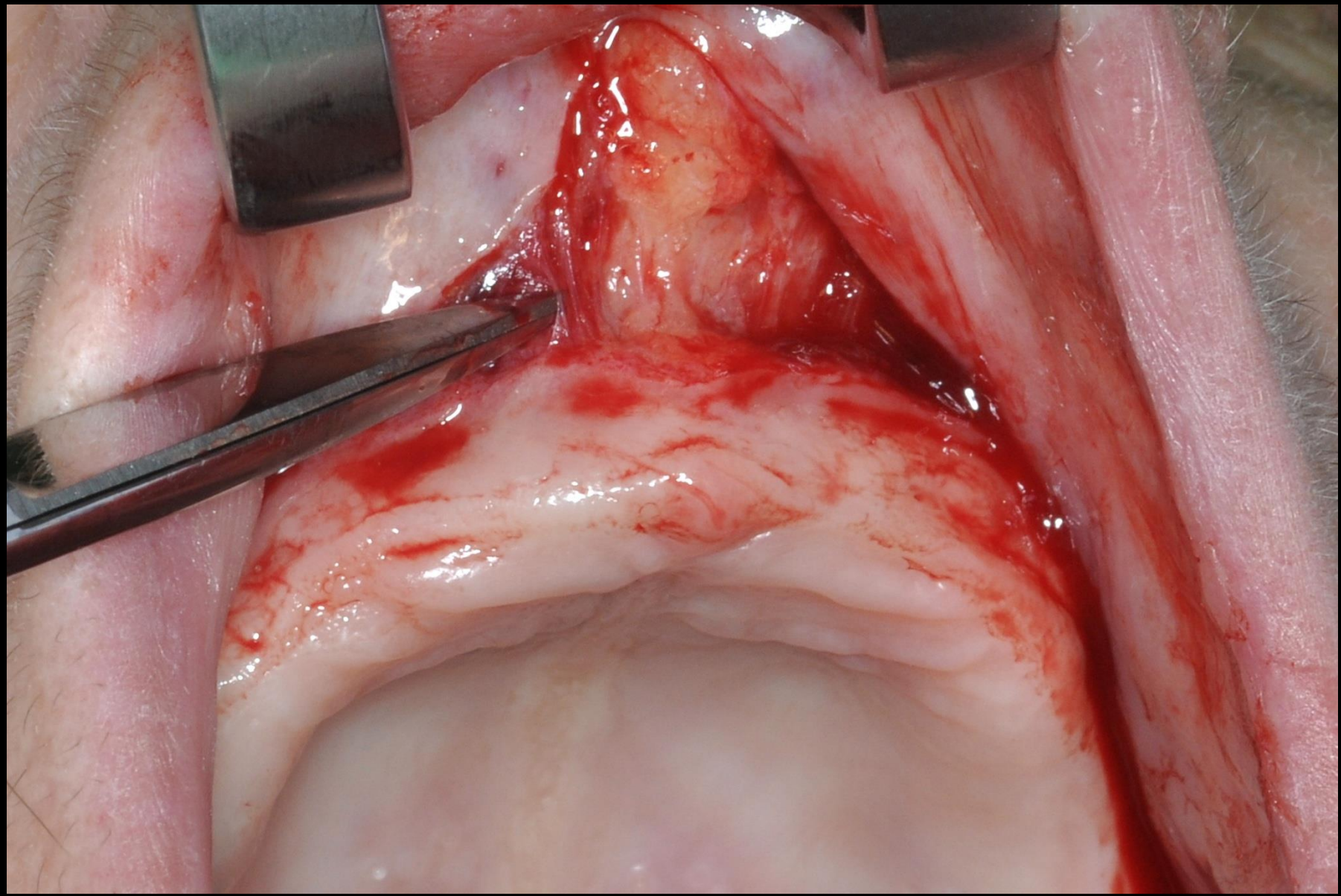


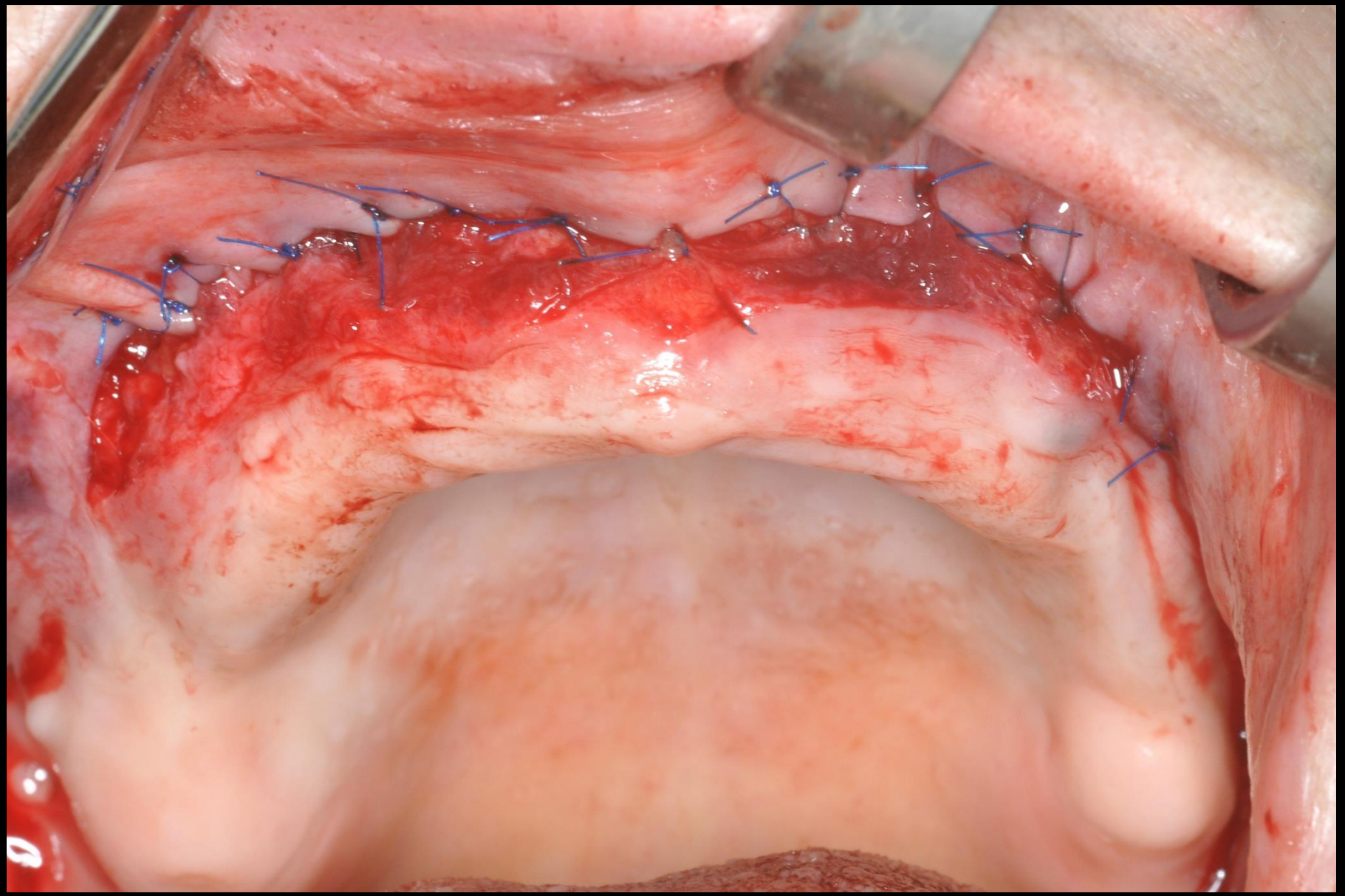
Vestibuloplasty

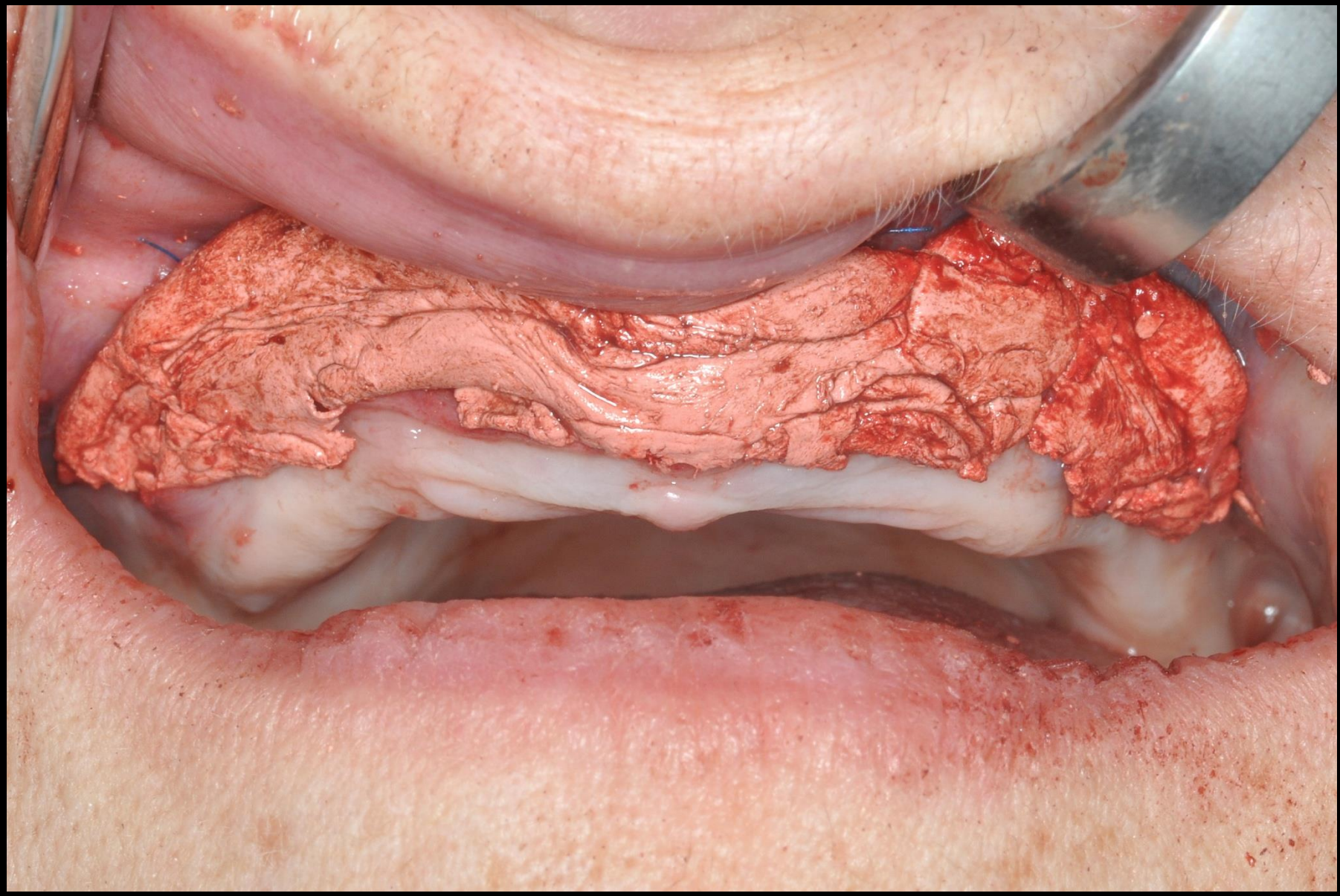


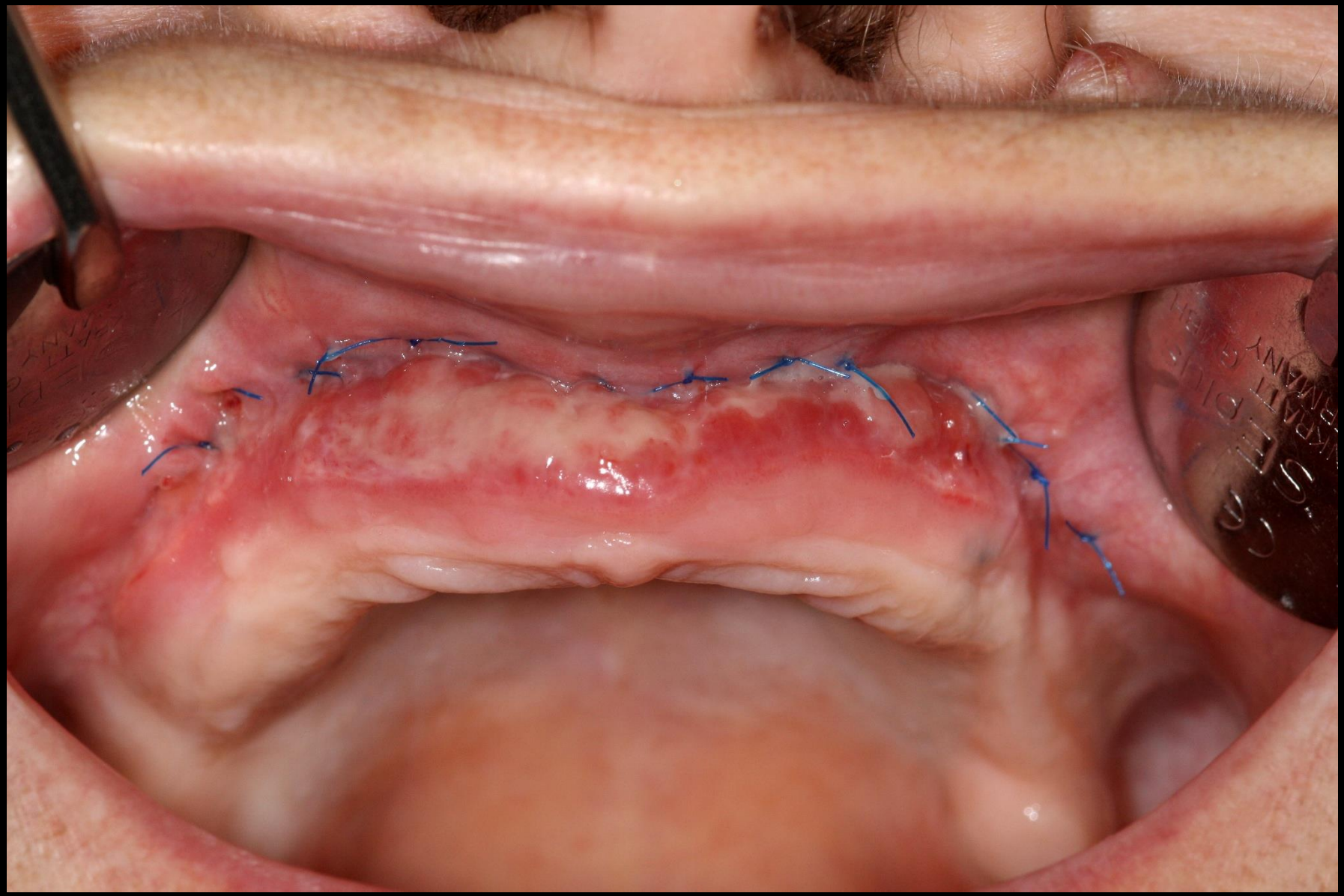








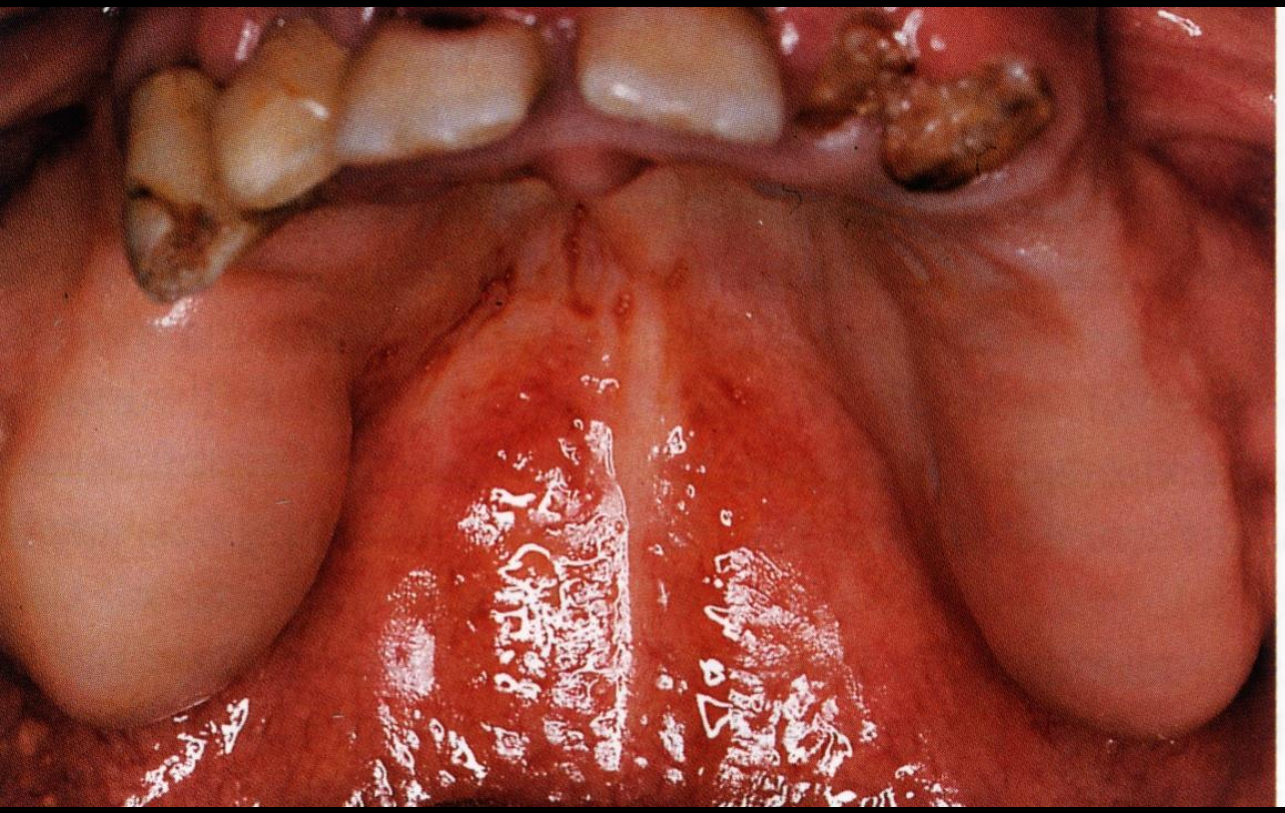


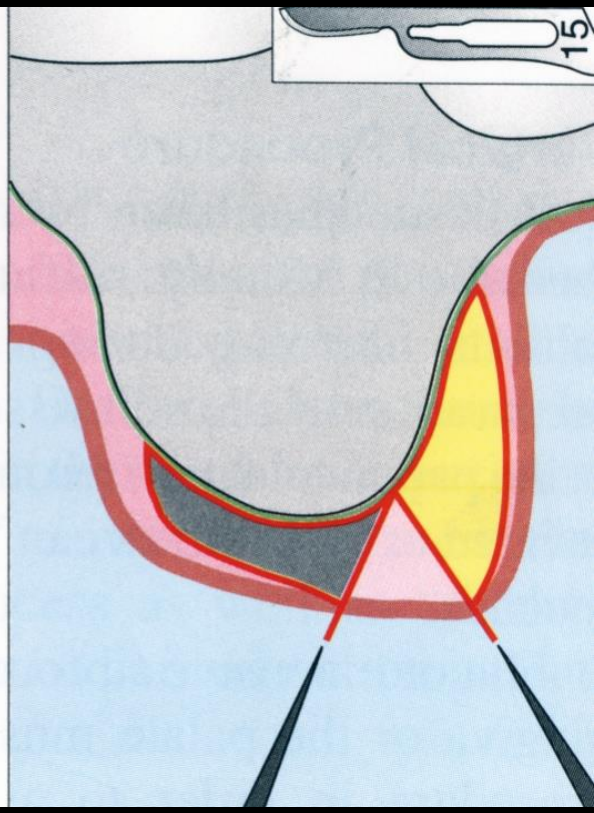


Common preprosthetic surgical interventions

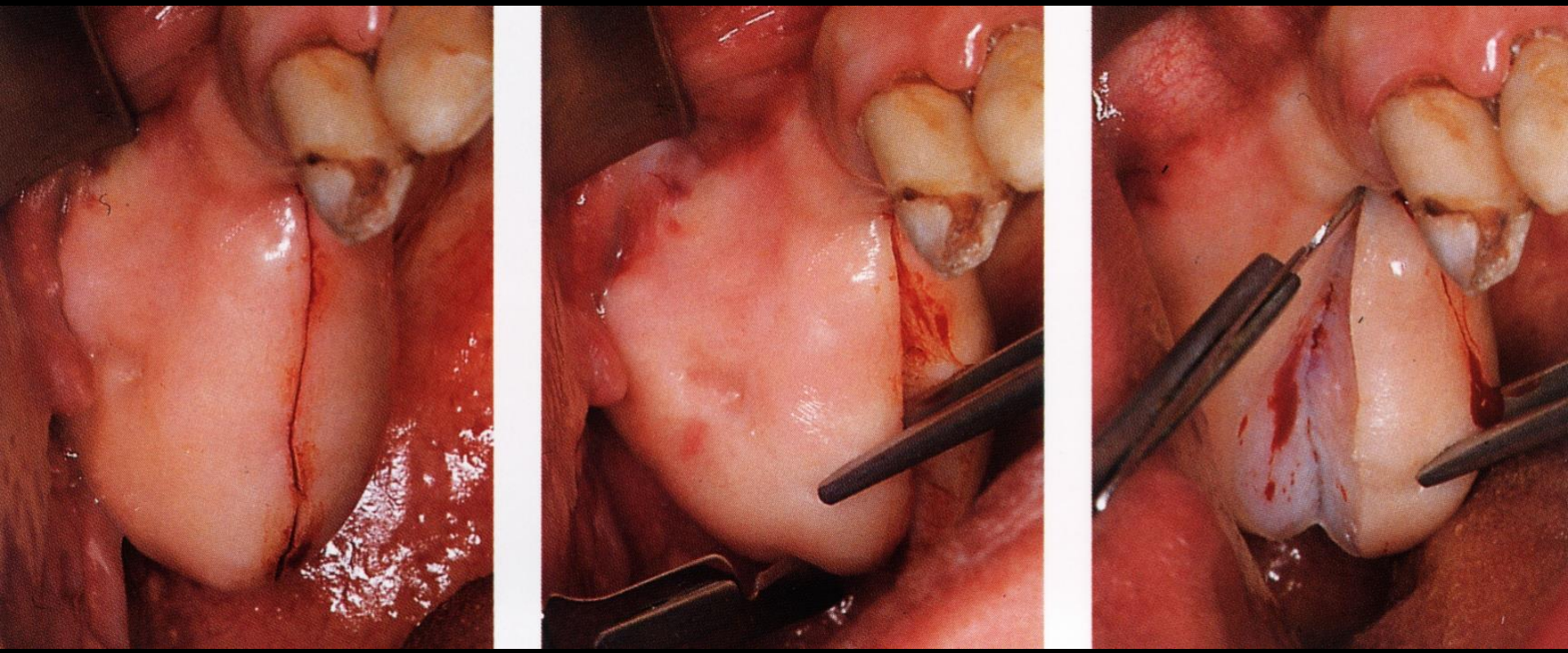
1. **Soft tissue corrections**
   - **removal of excessive freni**
   - **removal of denture hyperplasia**
   - **reduction of maxillary tuberosity**

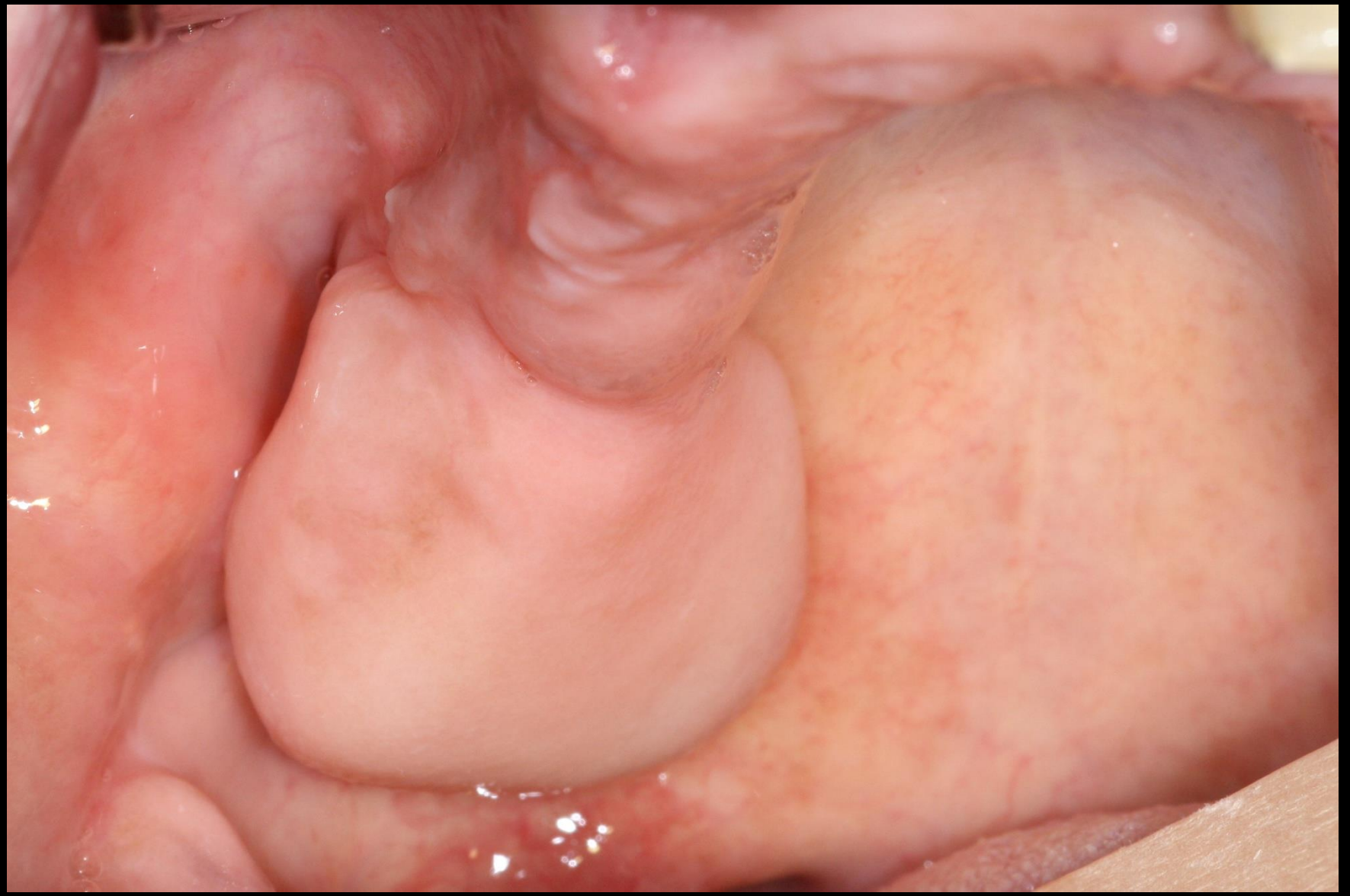
Tuber reduction

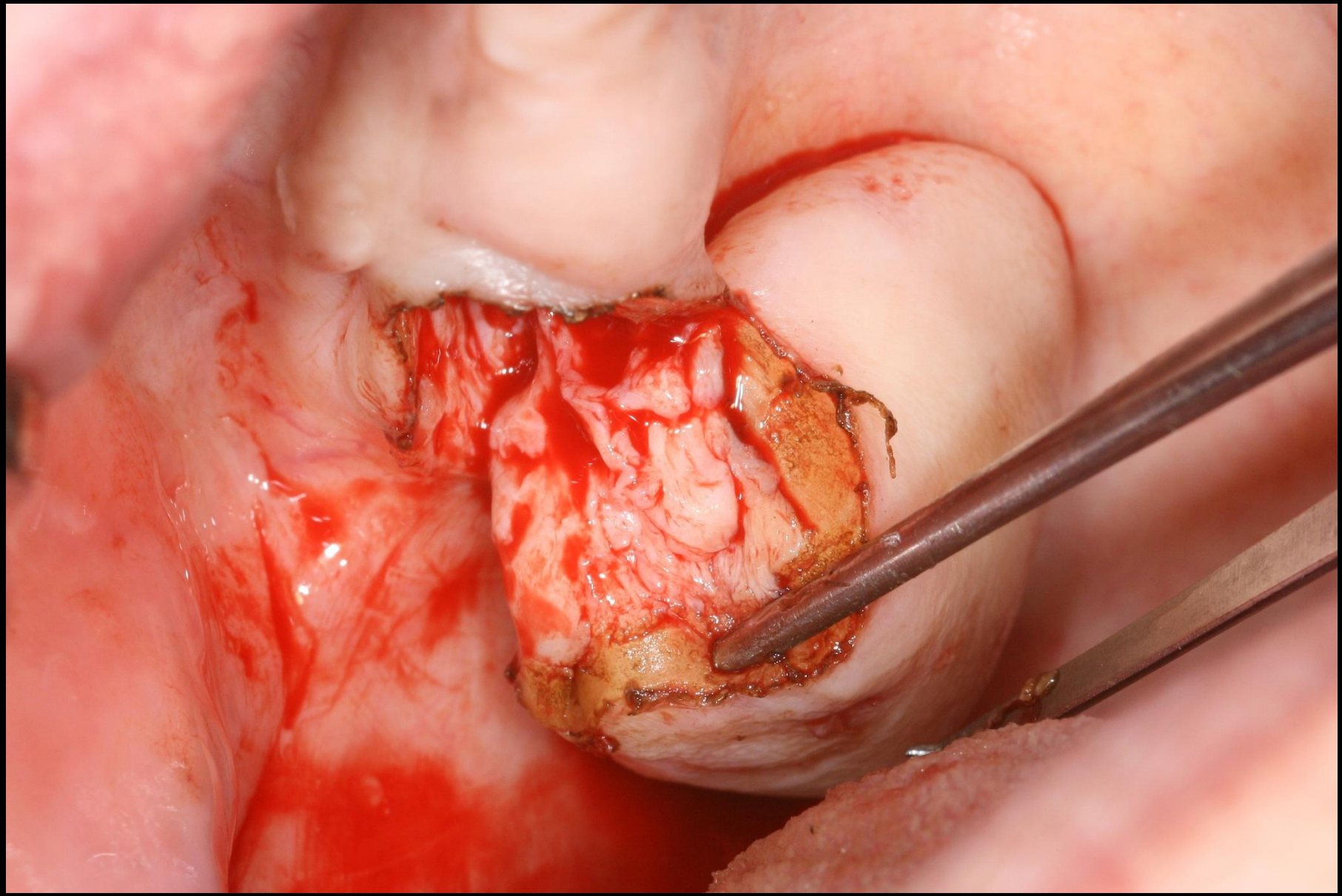


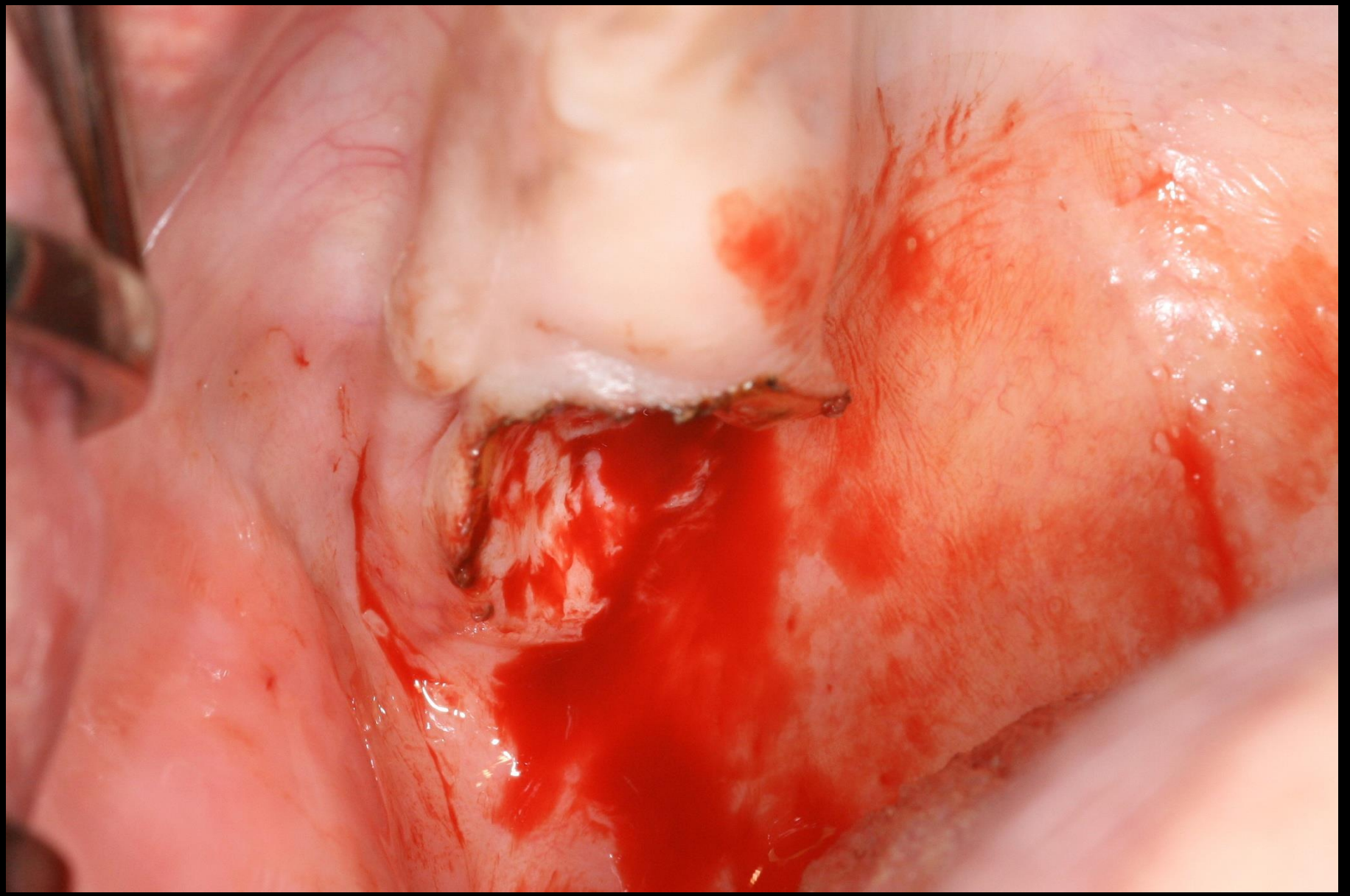


V-shaped excision from the tuberosity









Common preprosthetic surgical interventions

1. **Soft tissue corrections**
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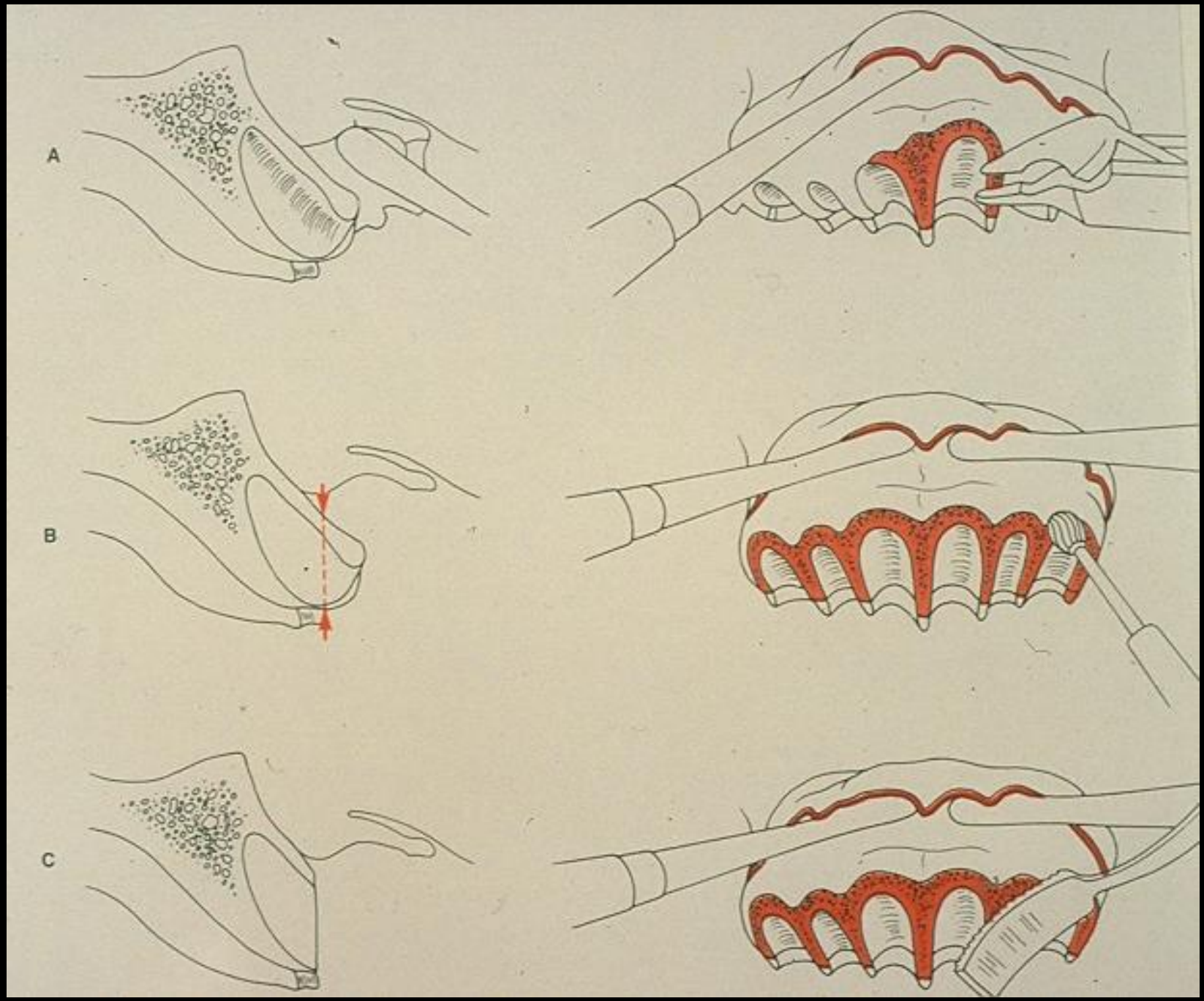
2. **Bone corrections**
   - **treatment after extraction of teeth**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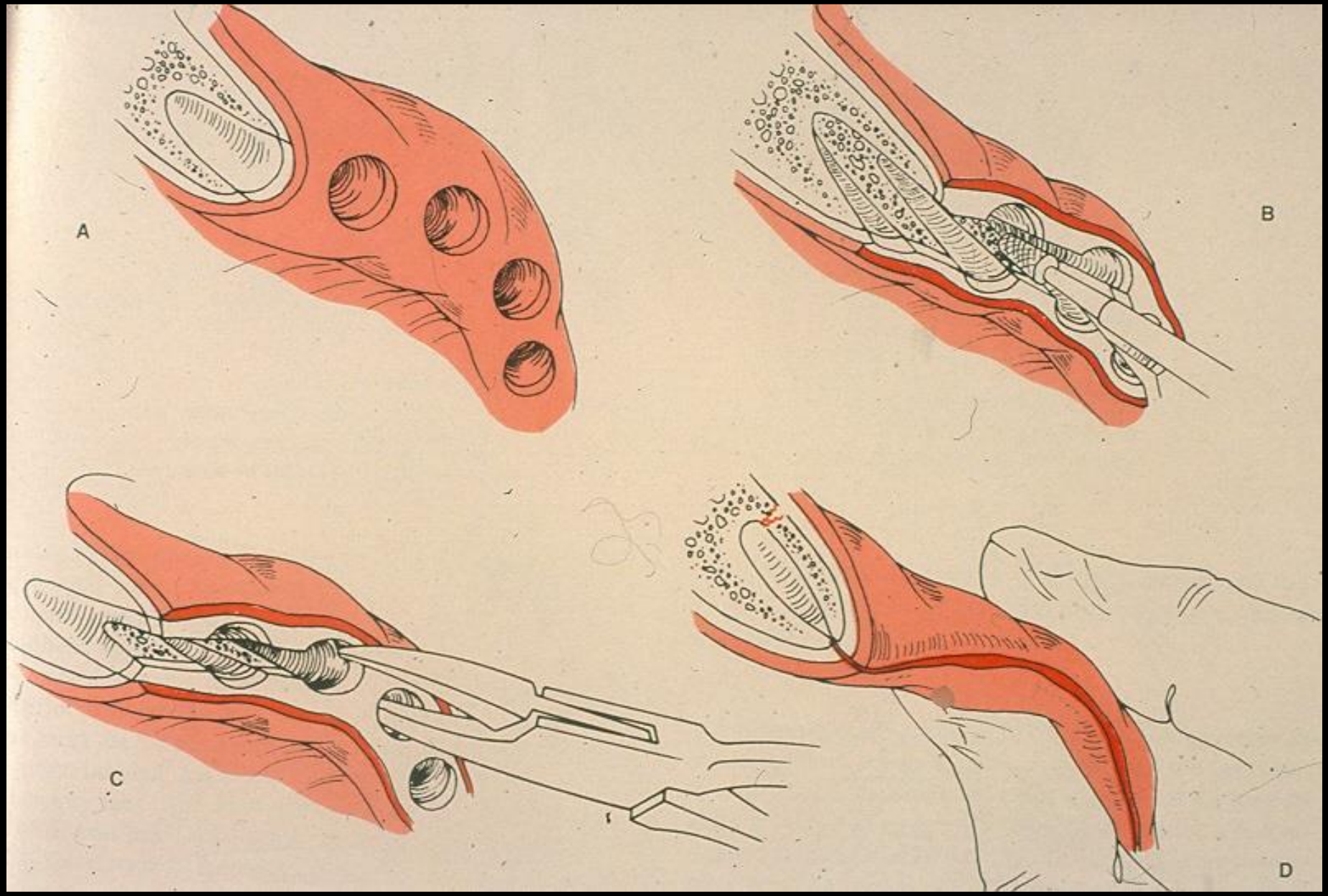
A
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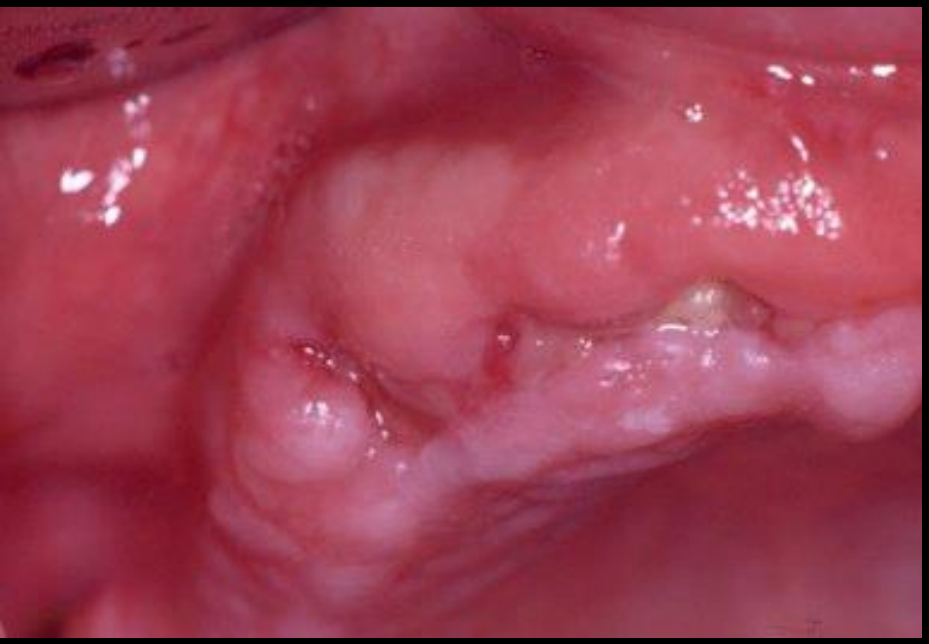
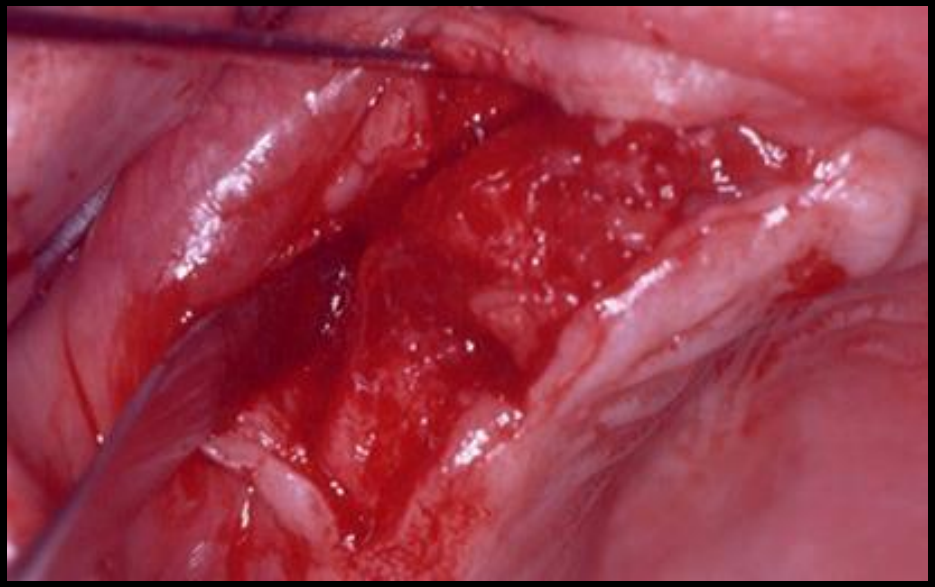
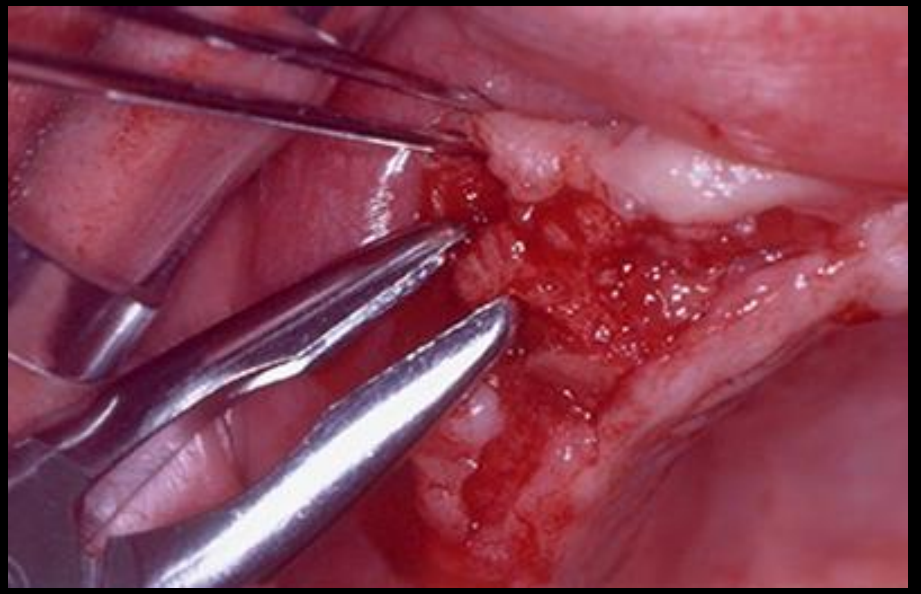
D

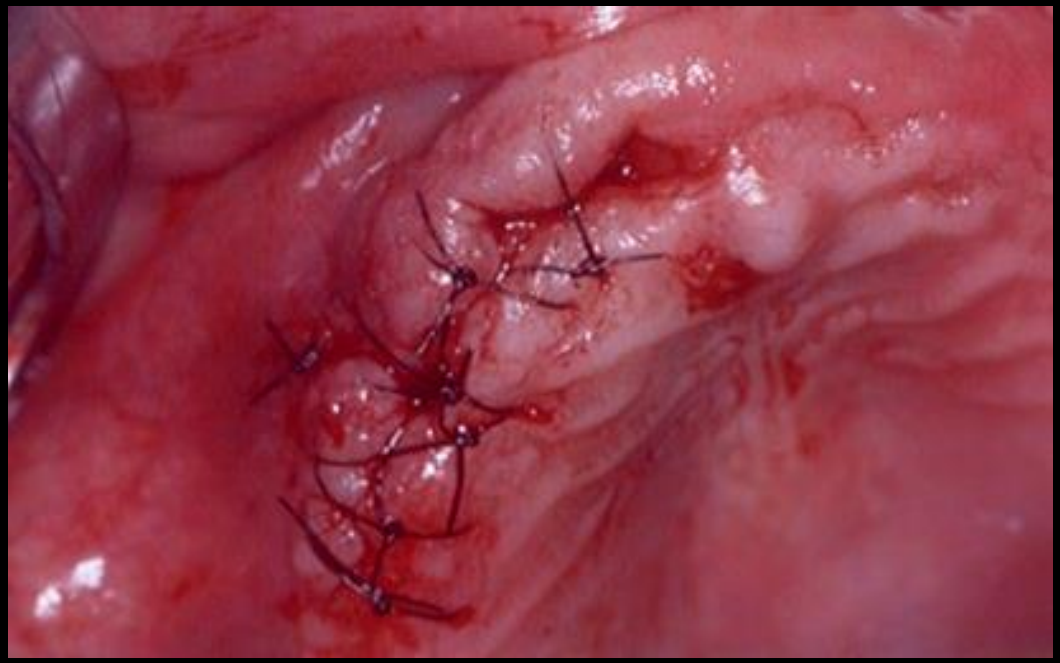
Excessive tooth socket after extraction



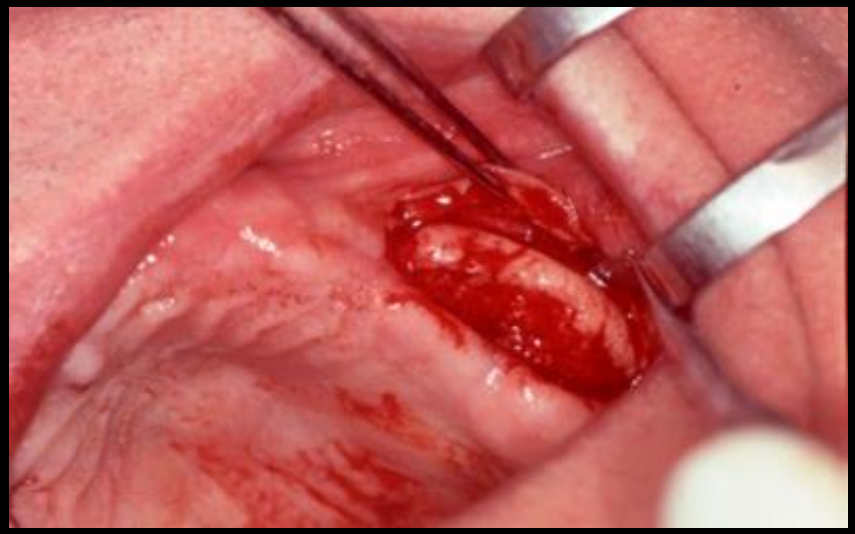
Alveotomy

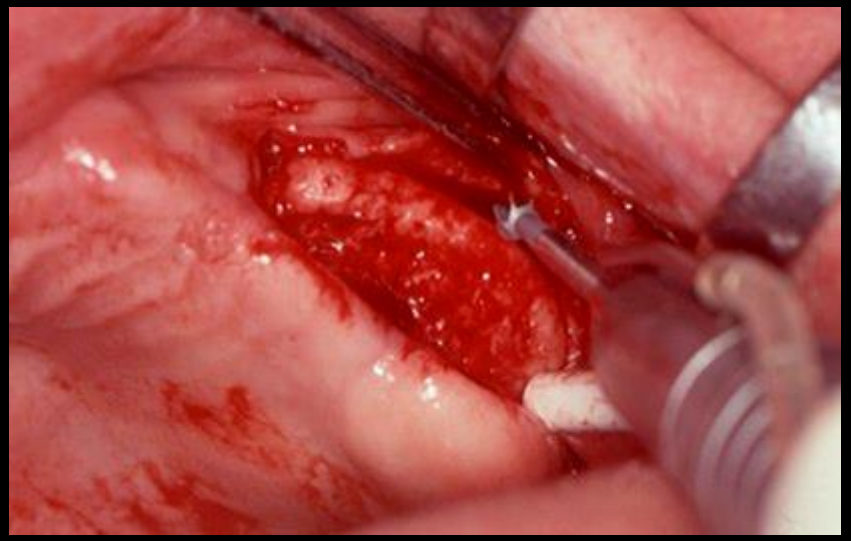


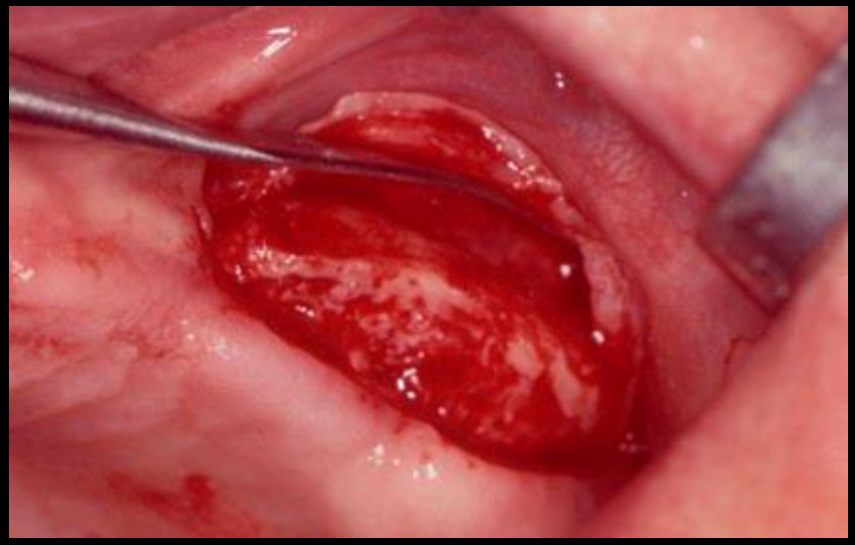


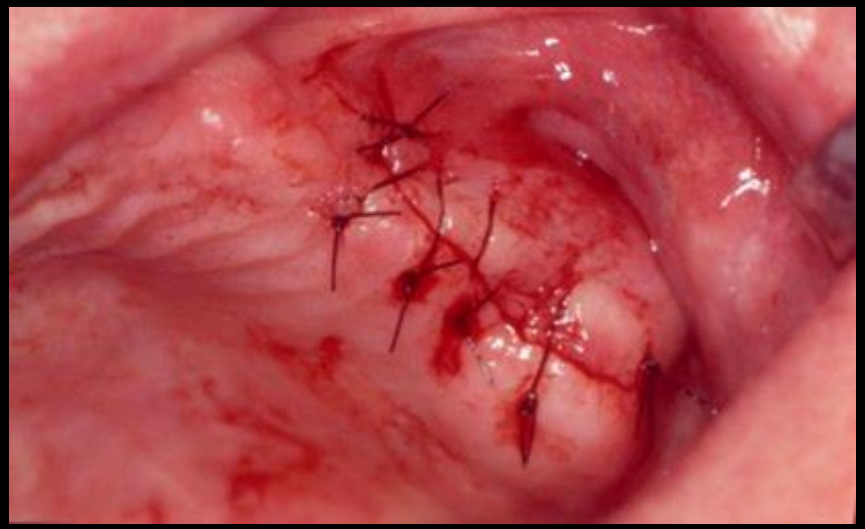


Alveotomy



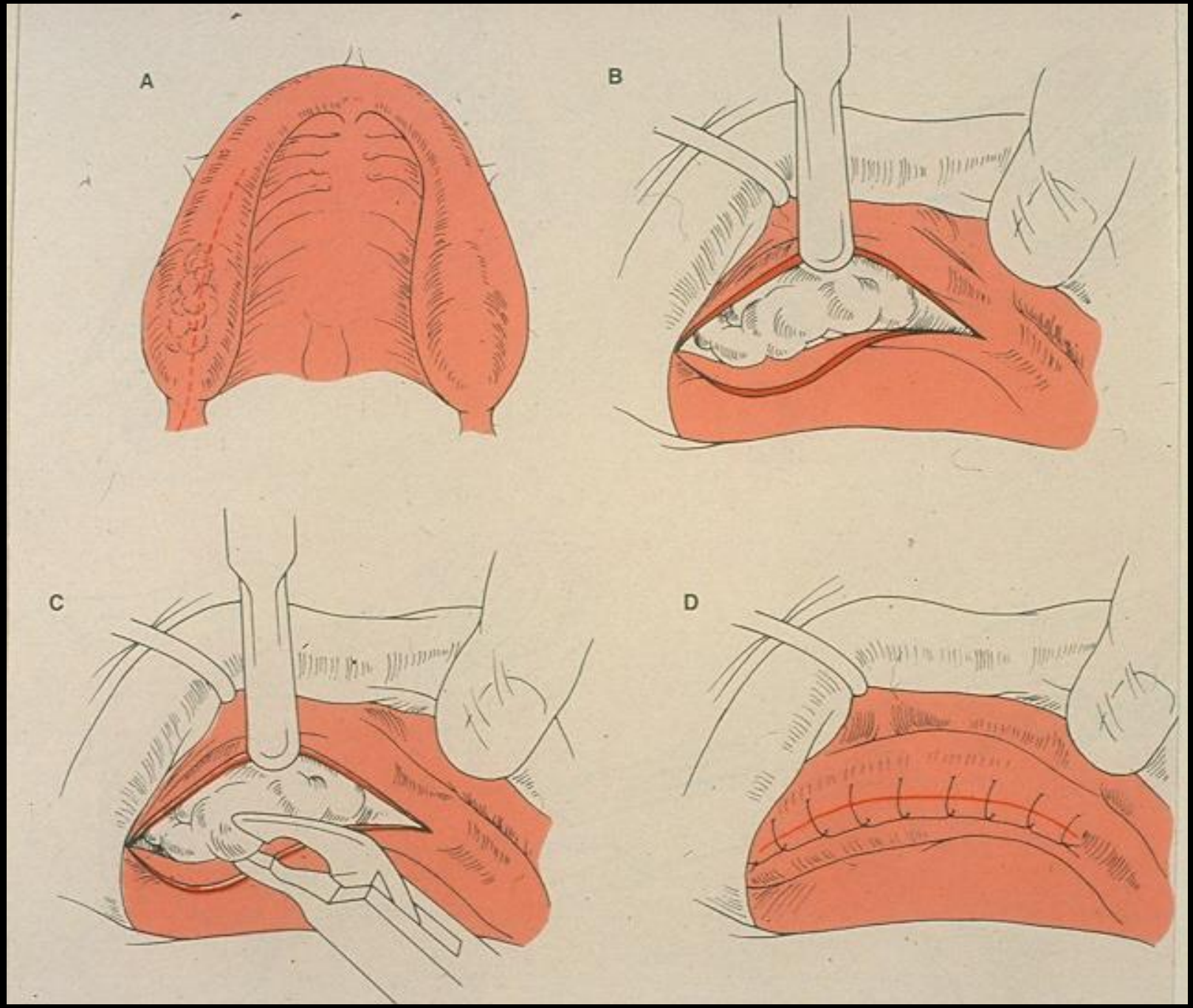






Common preprosthetic surgical interventions

1. **Soft tissue corrections**
   - **removal of excessive freni**
   - **removal of denture hyperplasia**
   - **reduction of maxillary tuberosity**
2. **Bone corrections**
   - **treatment after extraction of teeth**
   - **removal of exostoses**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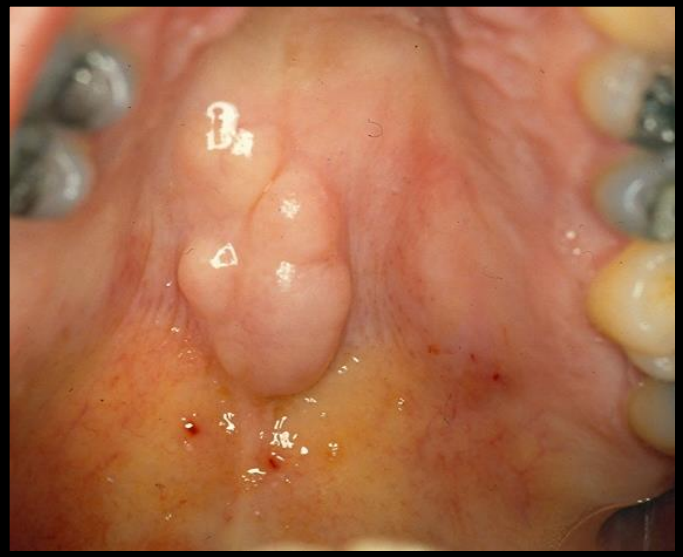
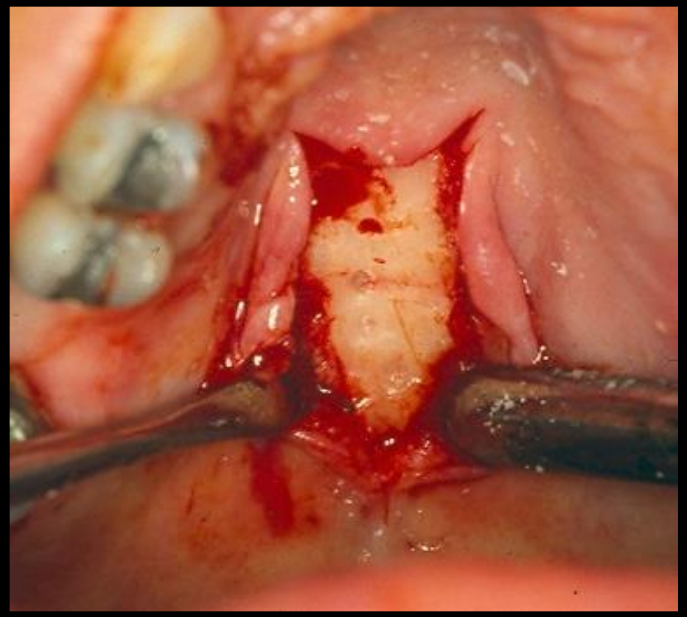
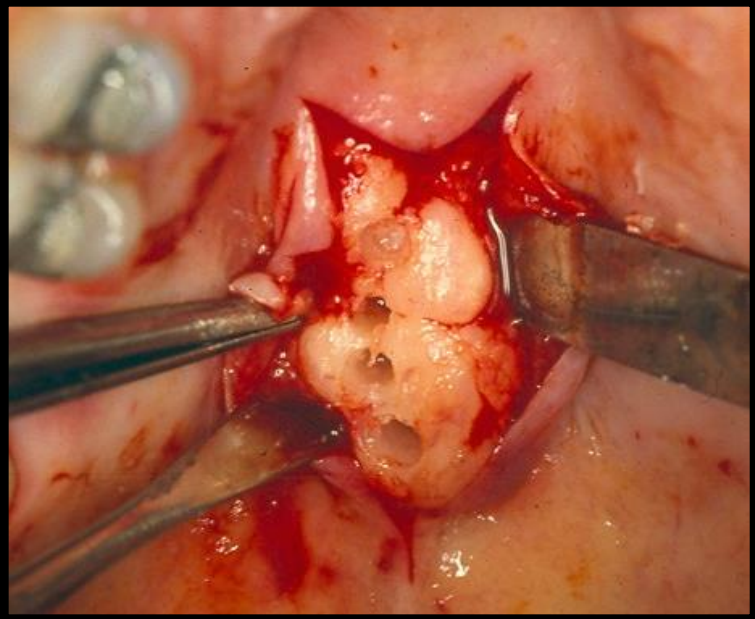
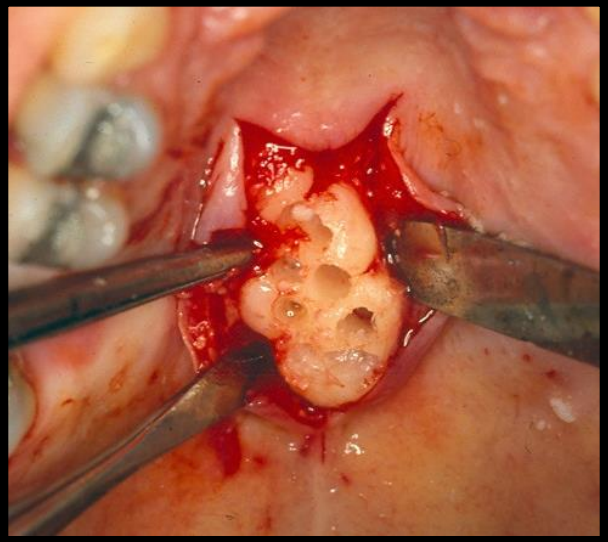
Removal of exostoses I.

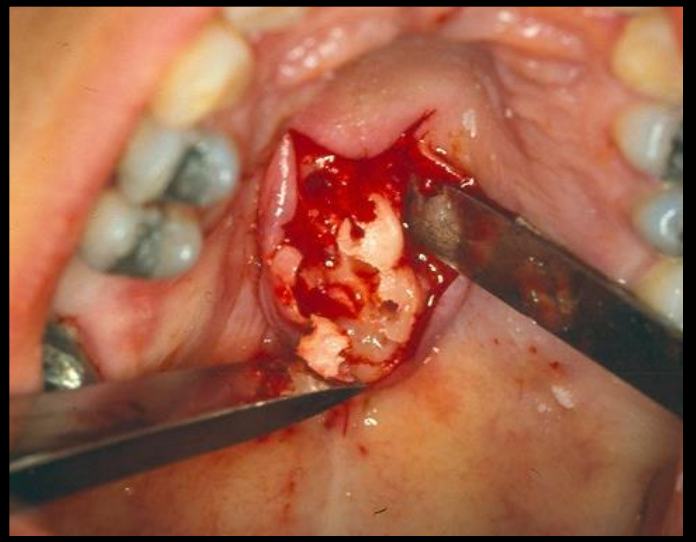


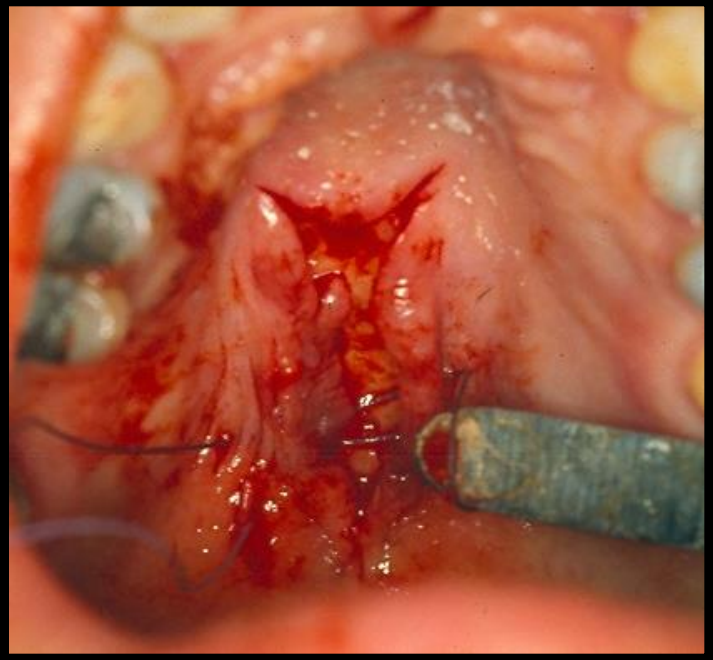


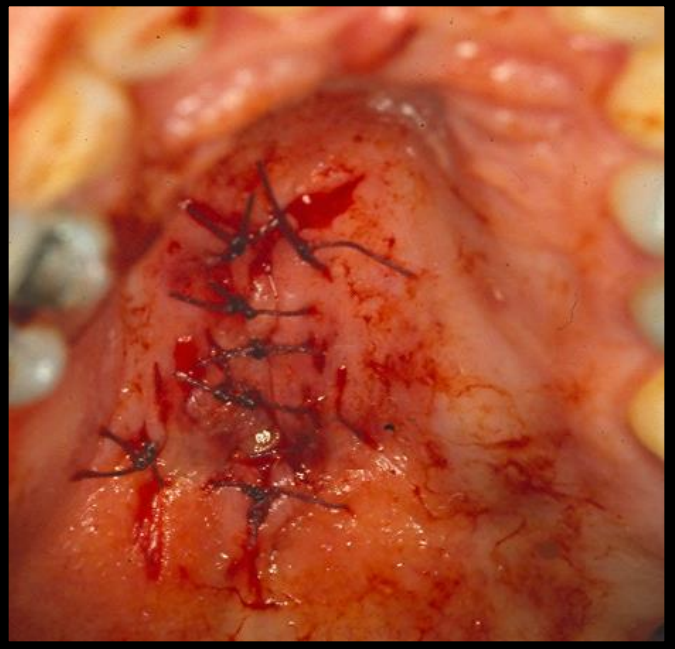


Removal of exostoses II.





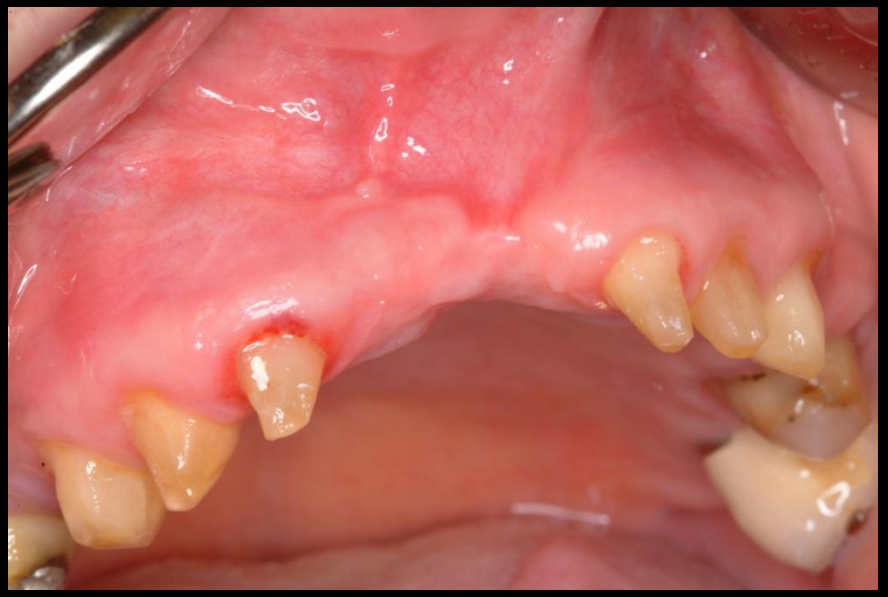


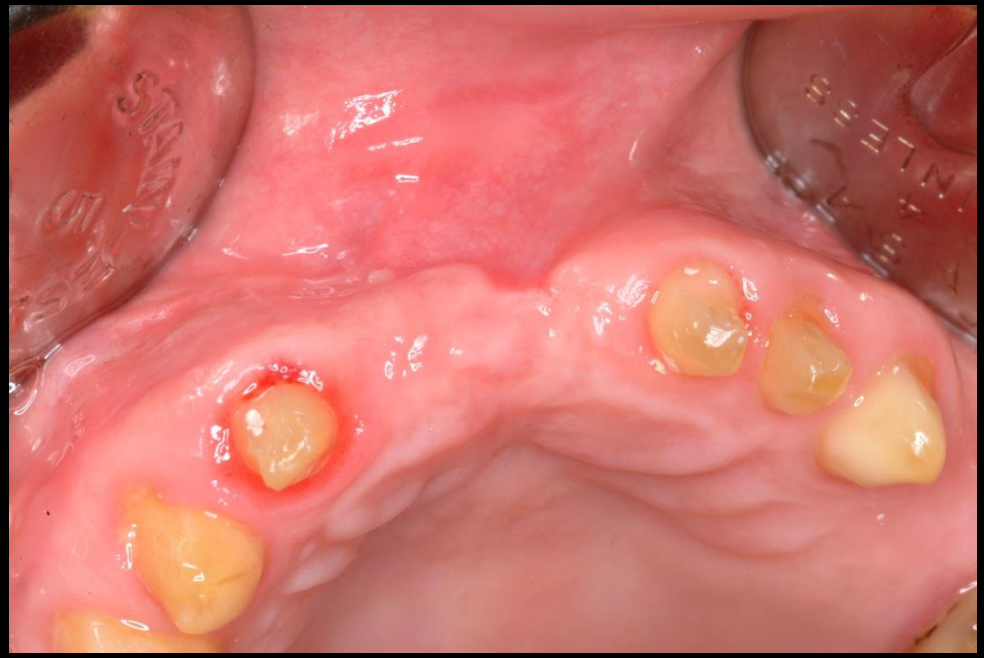


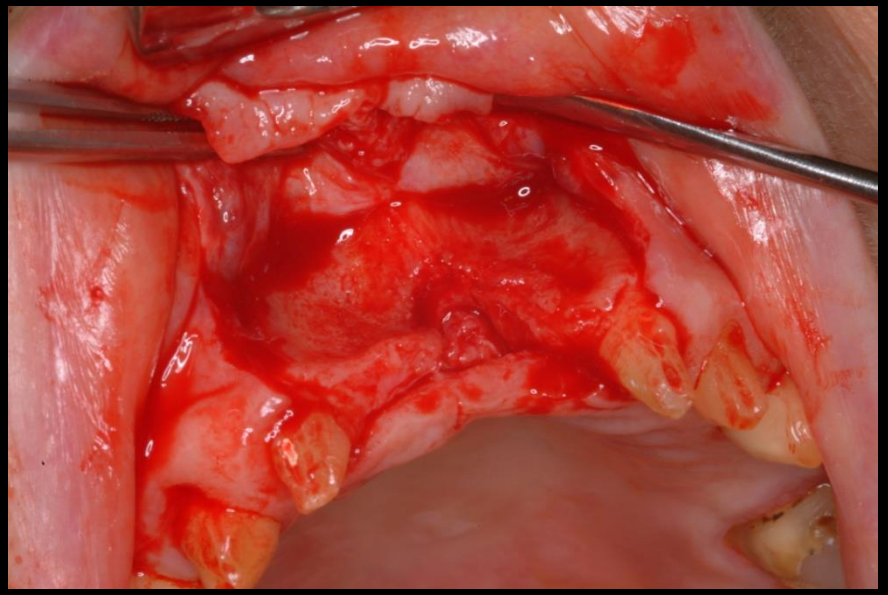
Common preprosthetic surgical interventions

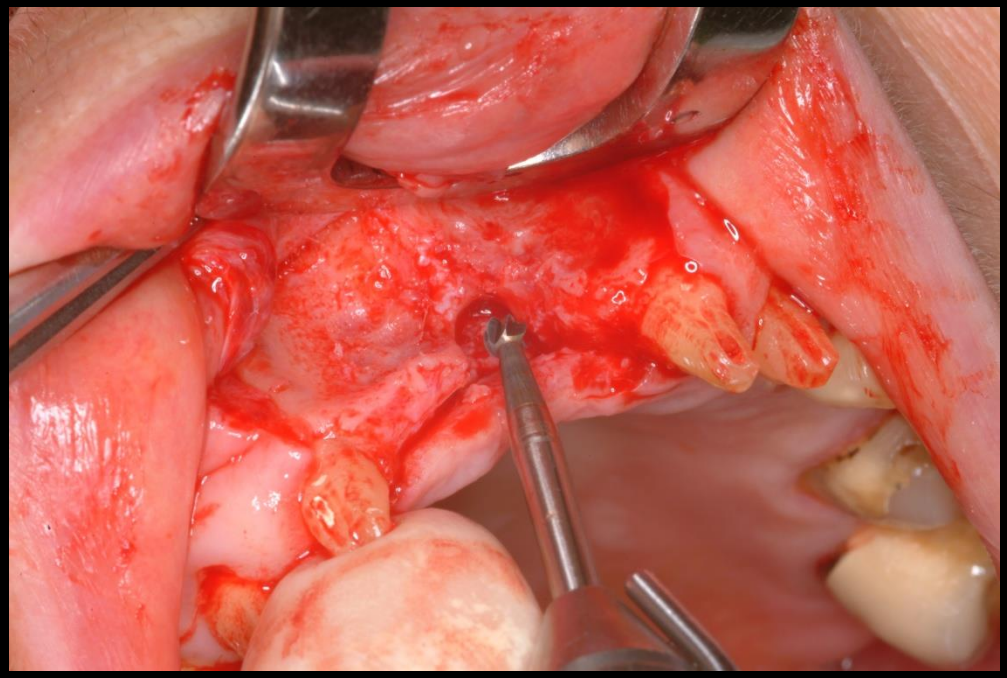
1. **Soft tissue corrections**
   - removal of excessive freni
   - removal of denture hyperplasia
   - reduction of maxillary tuberosity
2. **Bone corrections**
   - treatment after extraction of teeth
   - removal of exostoses
   - **bone grafting for aesthetic indication**

Bone loss in pontic site

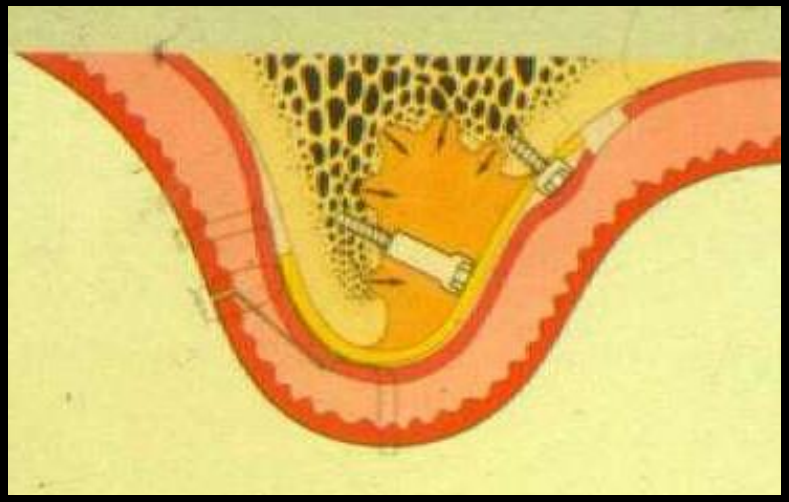


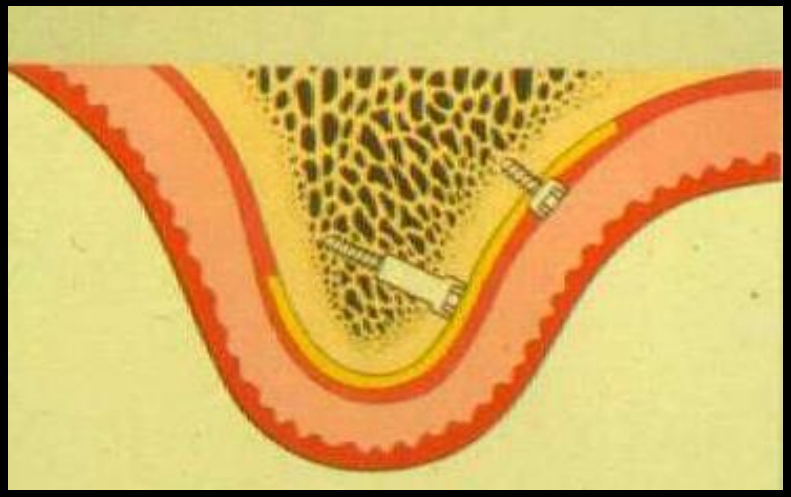






GBR = Guided Bone Regeneration

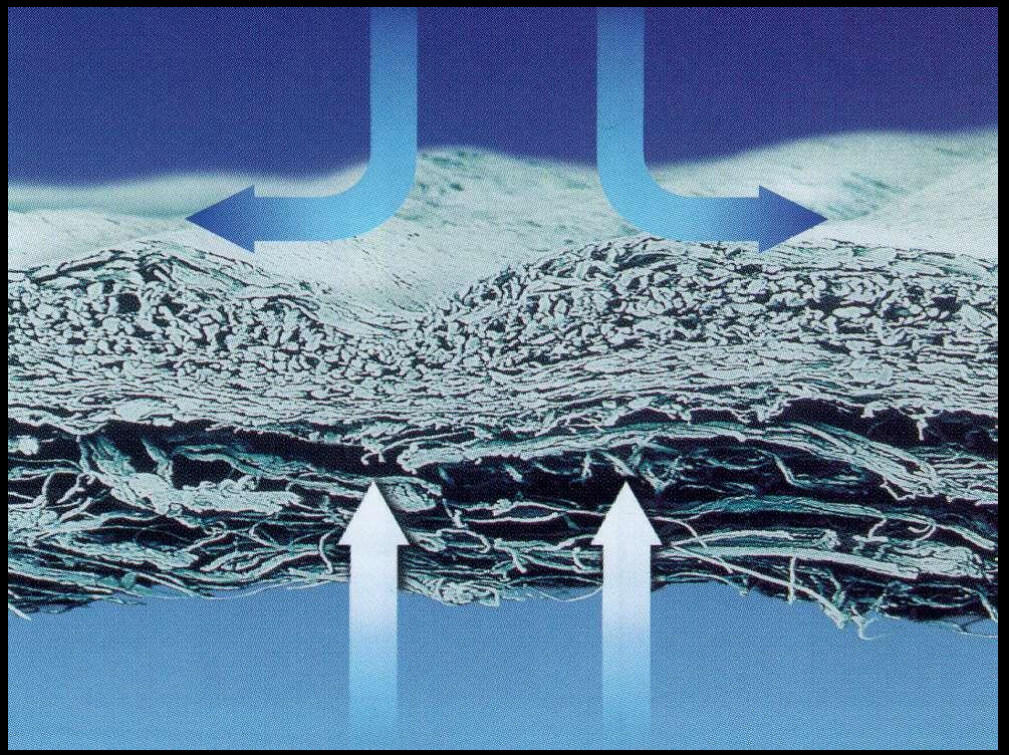


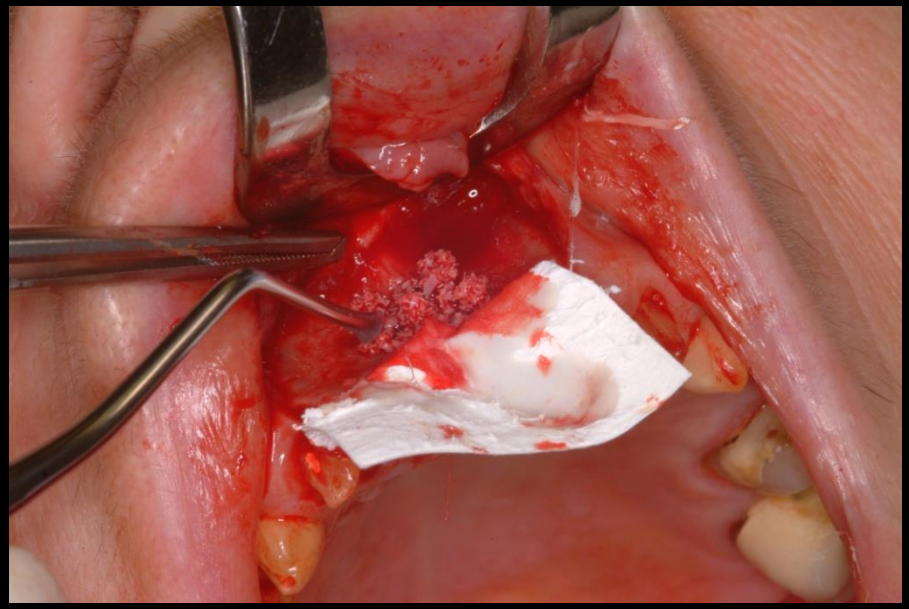


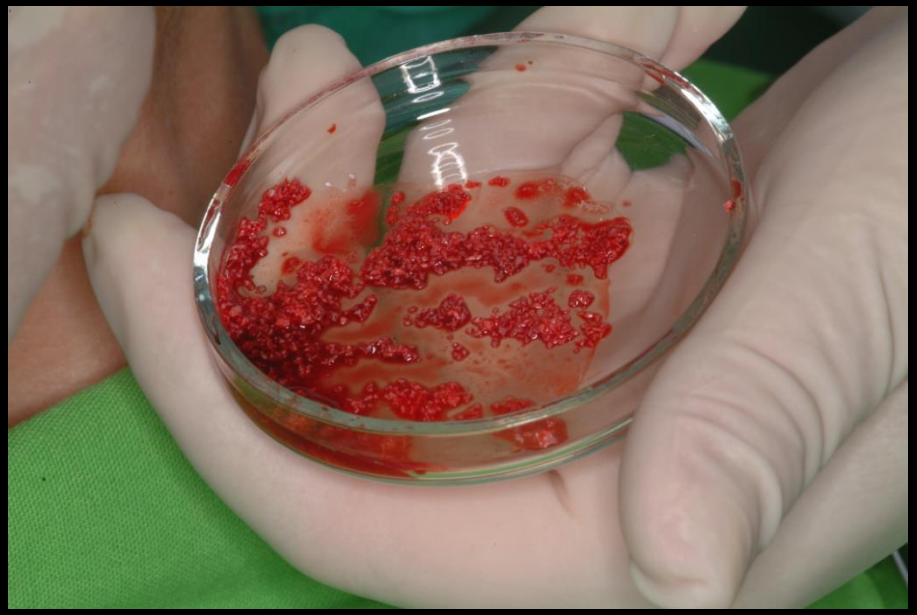
Schematic illustration of GBR technique

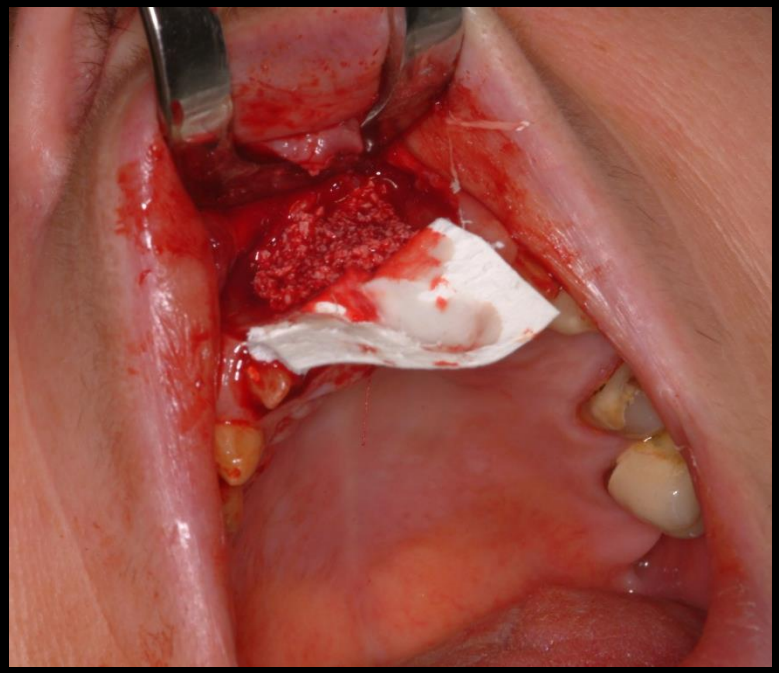
BIO-GIDE® MEMBRANE

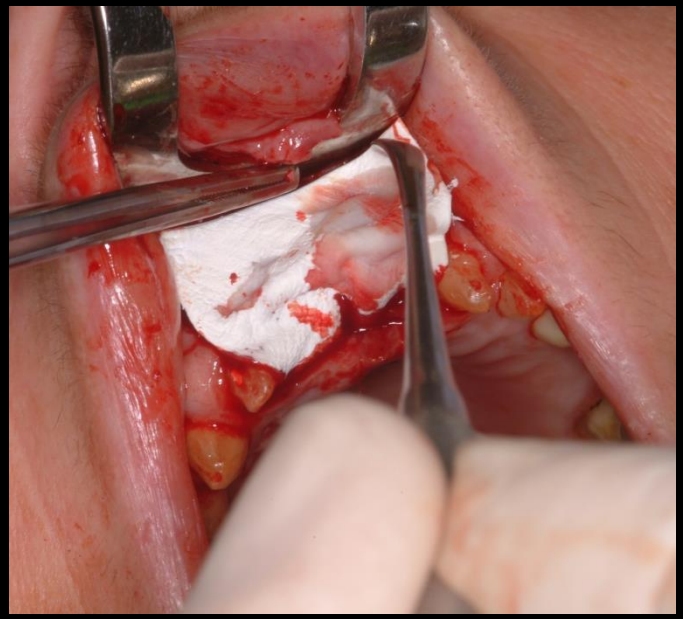
- Resorbable collagen
- Two-layers
  (dense, porous)
- Slow resorption
  (5-6 months)

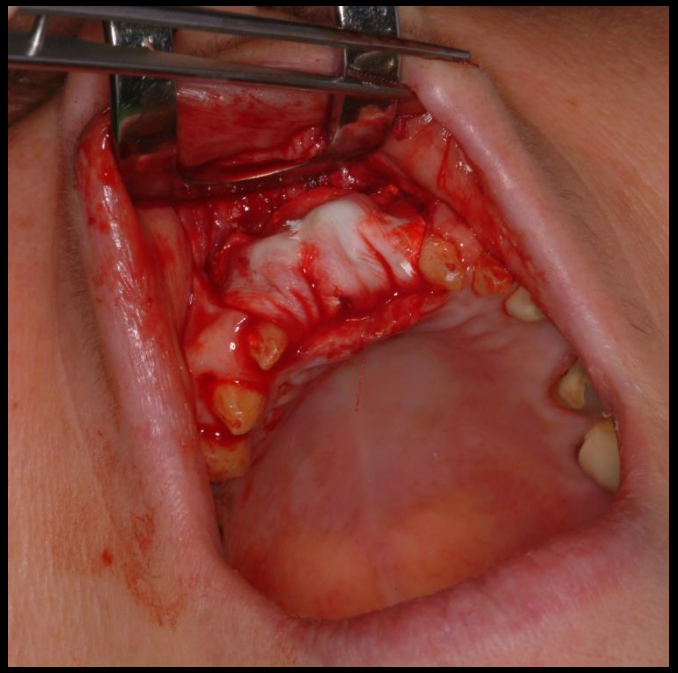


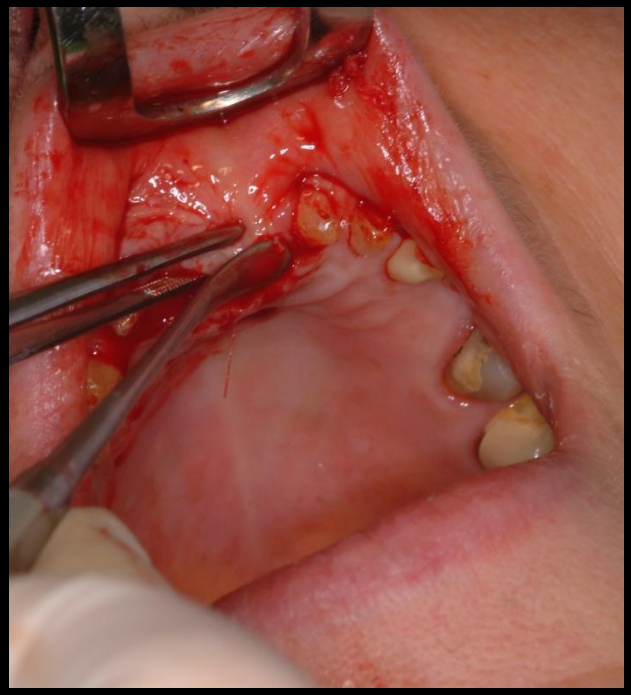


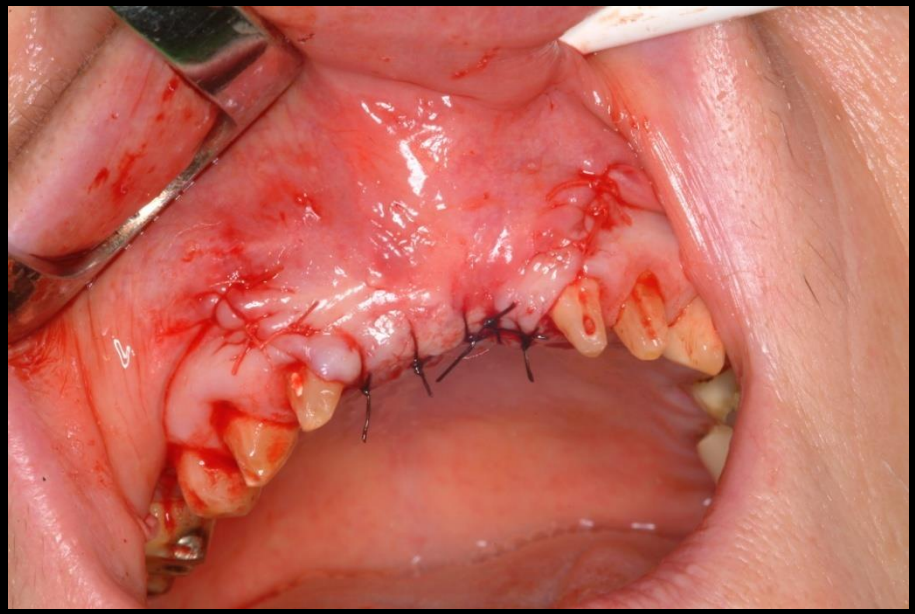




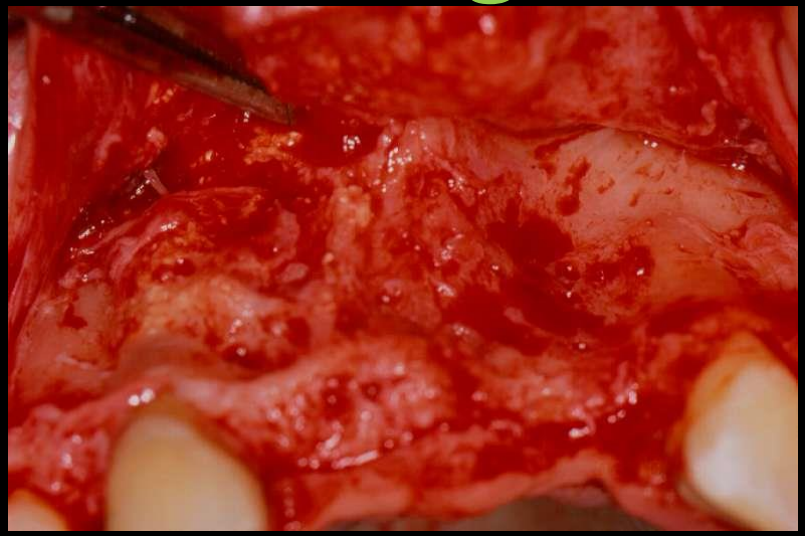


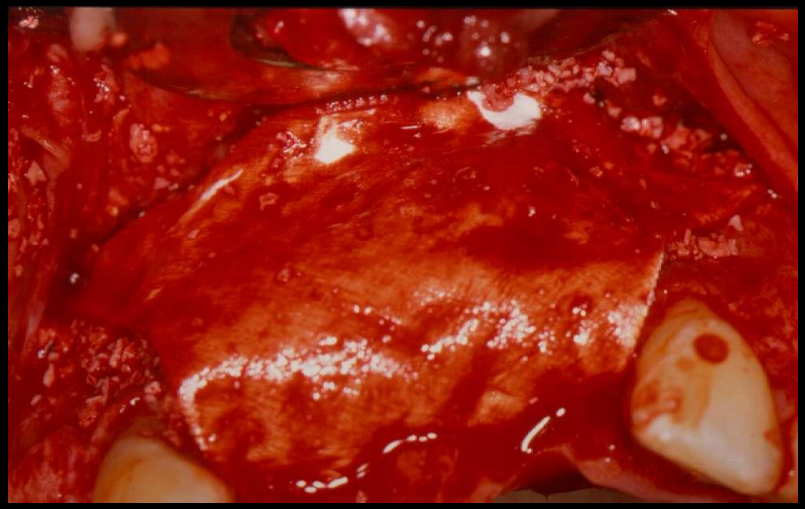


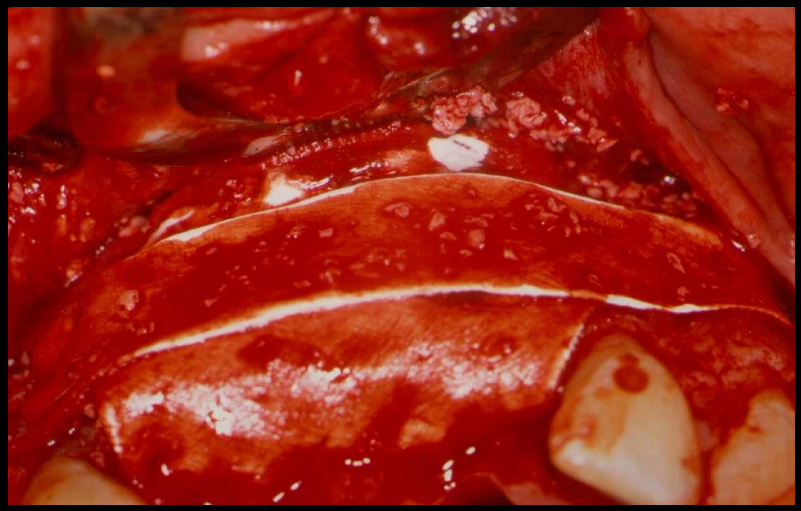




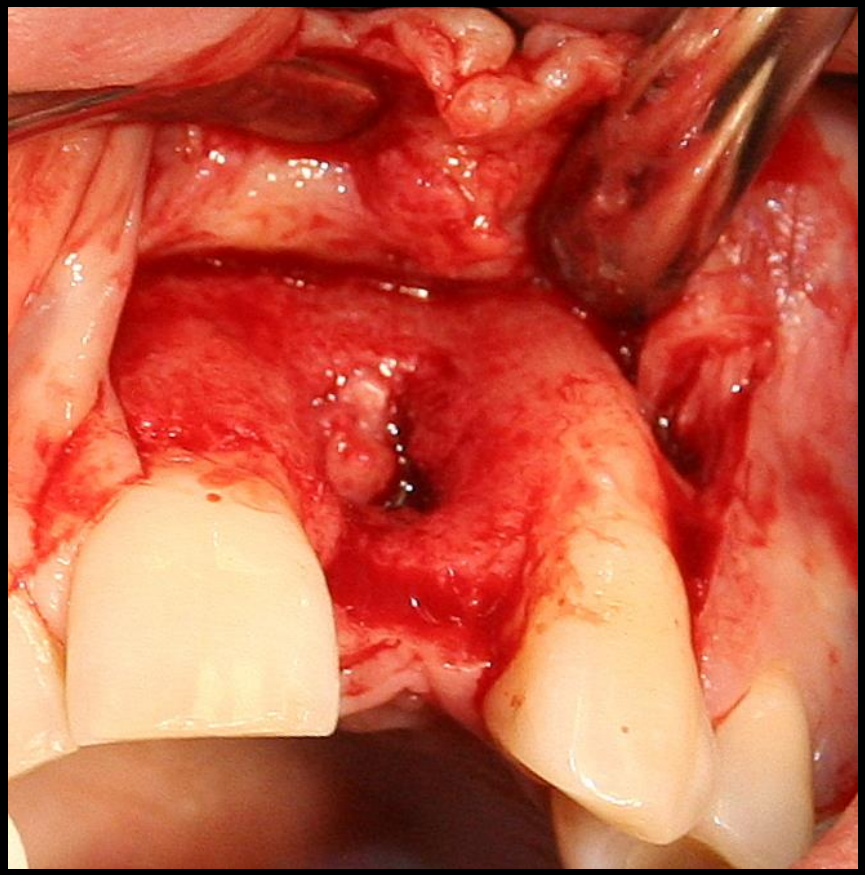
Two layers of Bio-Gide membrane for graft stabilization

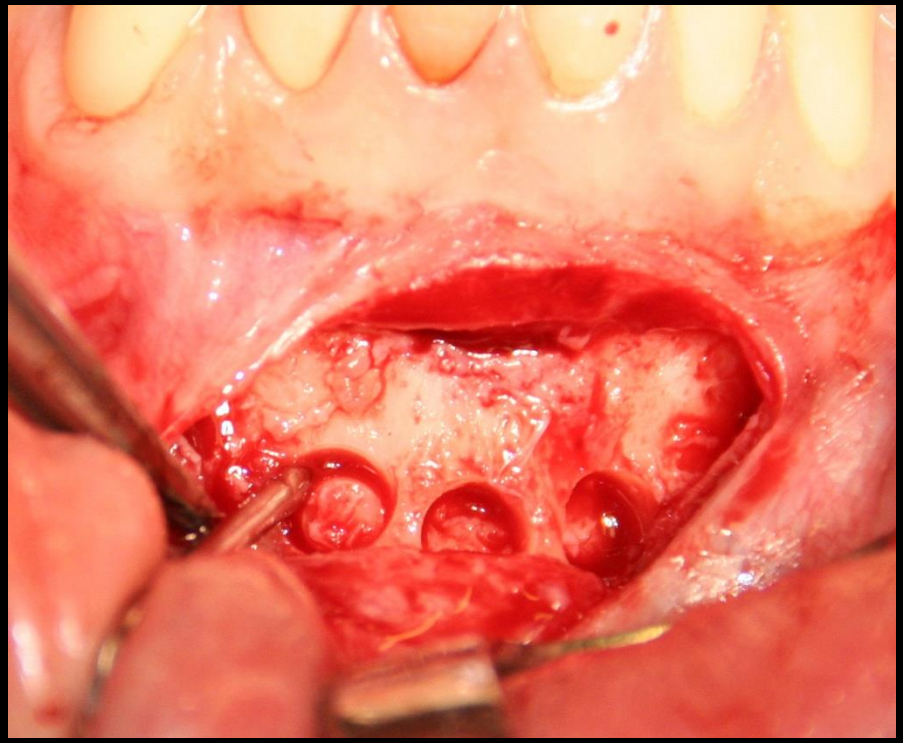


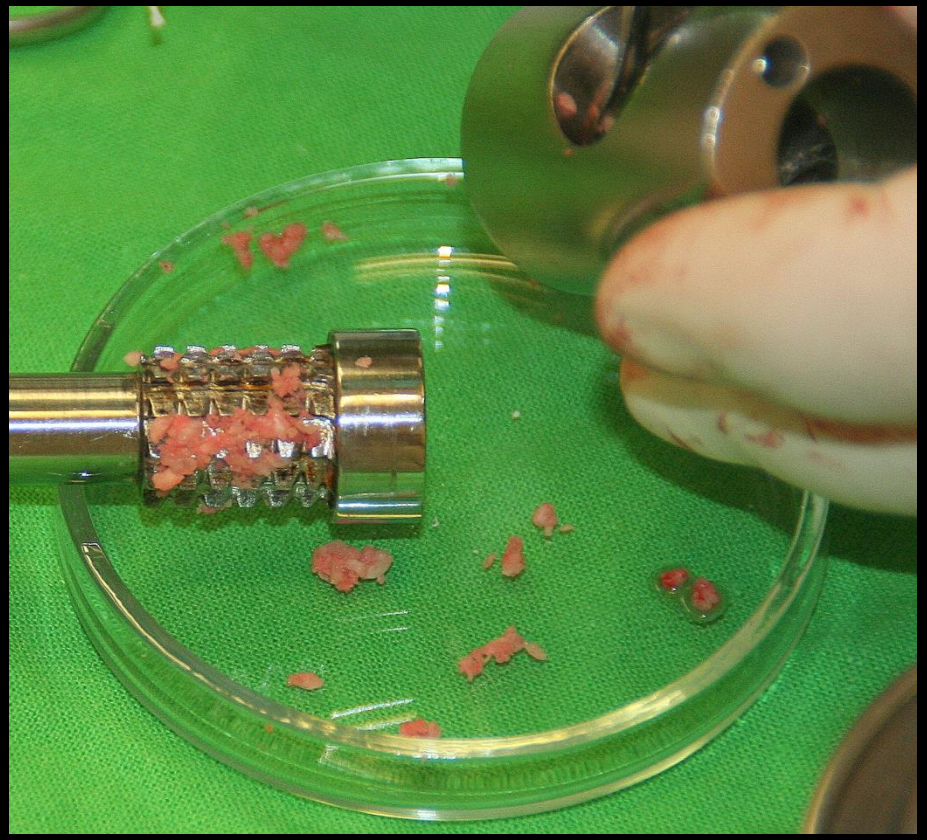


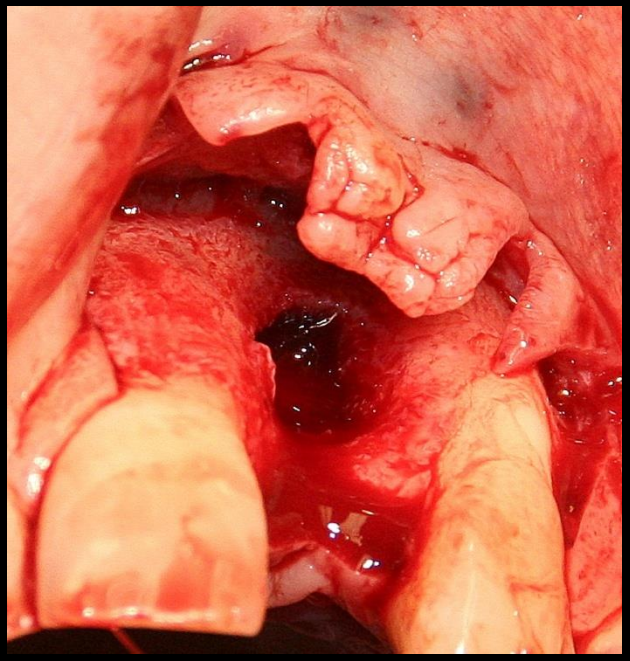


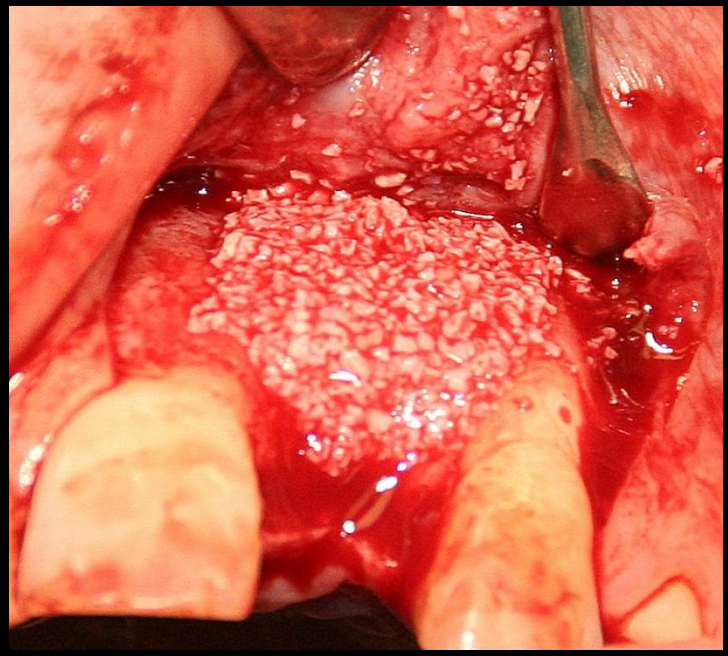
GBR

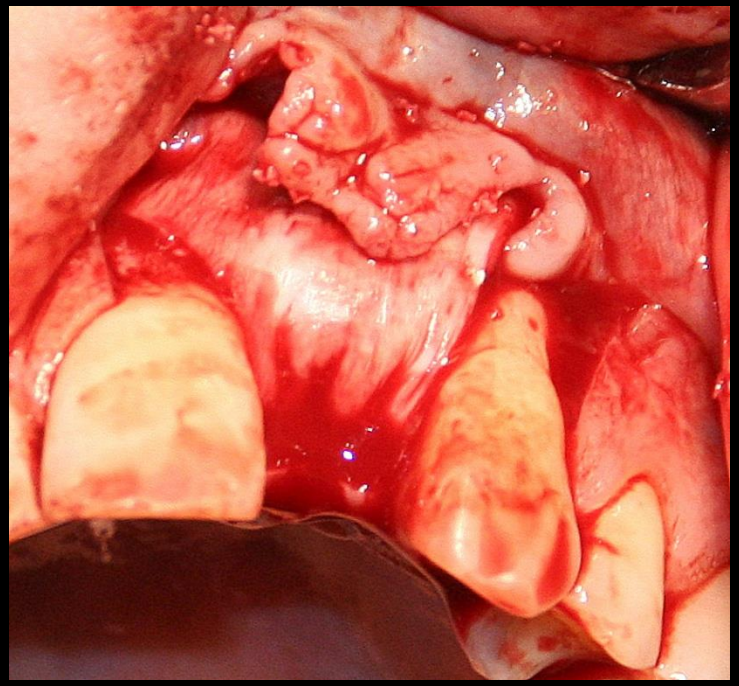












CT image of successful augnentation

Unsuccessful augmentation

Thank you for your attention!