

Immediate Implantation After Extraction With Non-submerged Guided Bone Regeneration in the Aesthetic Zone

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• Introduction:

Over the years, implant dentistry has significantly reduced treatment time, improved aesthetic outcomes, and enhanced patient satisfaction. Immediate implantation and provisionalization have emerged as attractive options, offering fewer surgical interventions and immediate esthetic improvements while preserving bone and gingival architecture in the anterior esthetic zone.

According to the 5th ITI Consensus Conference in 2013, successful esthetic outcomes for immediate implantation depend on careful case selection. Essential criteria include :

- an intact labial bone wall (>1 mm),
- a thick soft tissue biotype,
- no acute infection at the site,
- adequate bone apical and palatal to the socket for primary stability.

Table 2	Frequency distribution (%) of examined teeth according to thickness of the facial bone walls at MP1		
	Missing bone wall	Bone wall thickness < 1 mm	Bone wall thickness ≥ 1 mm
Central incisor	27.5	67.9	4.6
Lateral incisor	23.0	65.5	11.5
Canine	31.7	59.7	8.6
First premolar	17.5	55.0	27.5
Total	25.7	62.9	11.4

Thickness of the Anterior Maxillary Facial Bone Wall—A Retrospective Radiographic Study Using Cone Beam Computed Tomography
 Vedrana Braut, DDS, Dr Med Dent/Michael M. Bornstein, PD Dr Med Dent**
 Urs Belser, Prof Dr Med Dent/Daniel Buser, Prof Dr Med Den

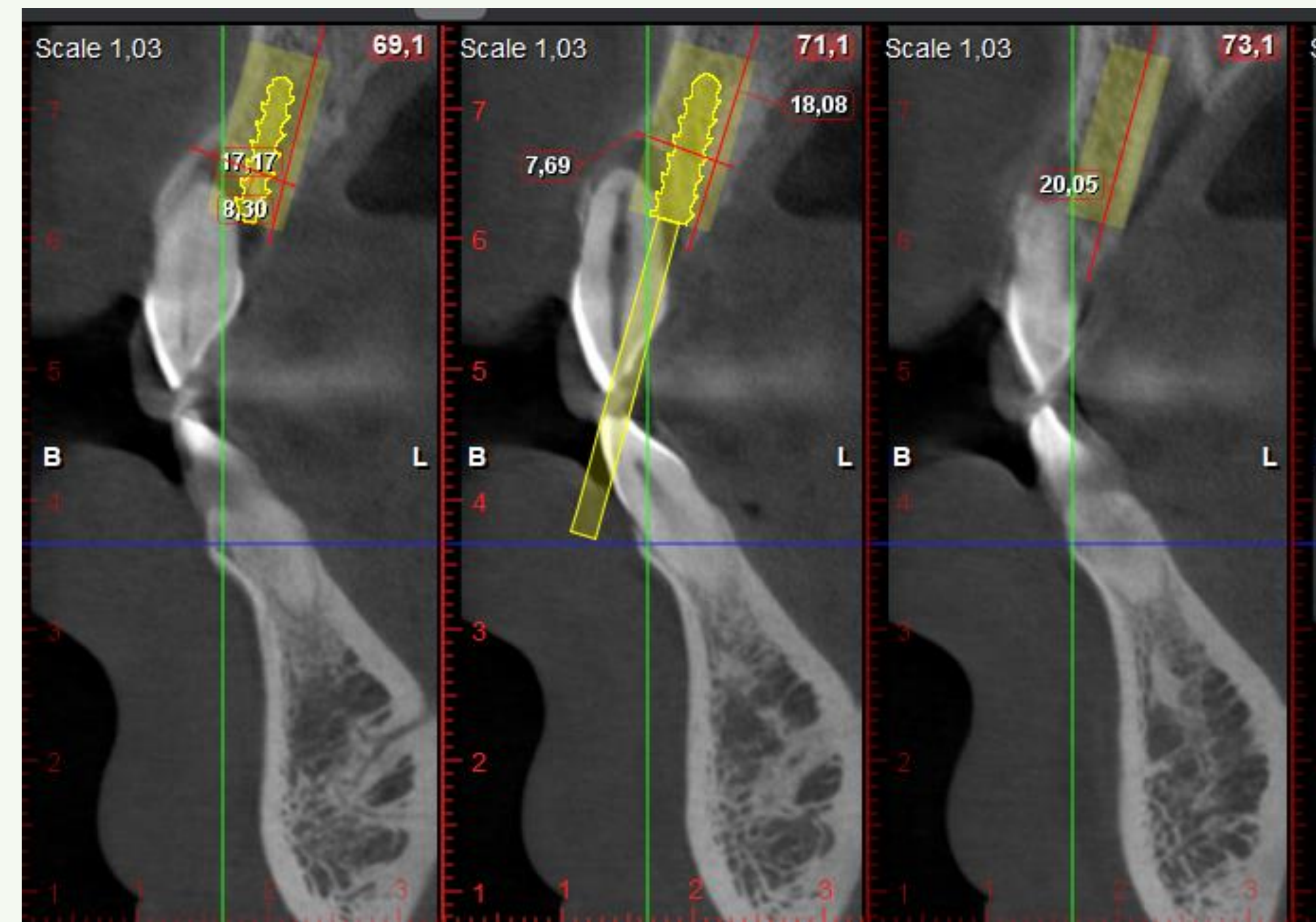


- **Methods:**

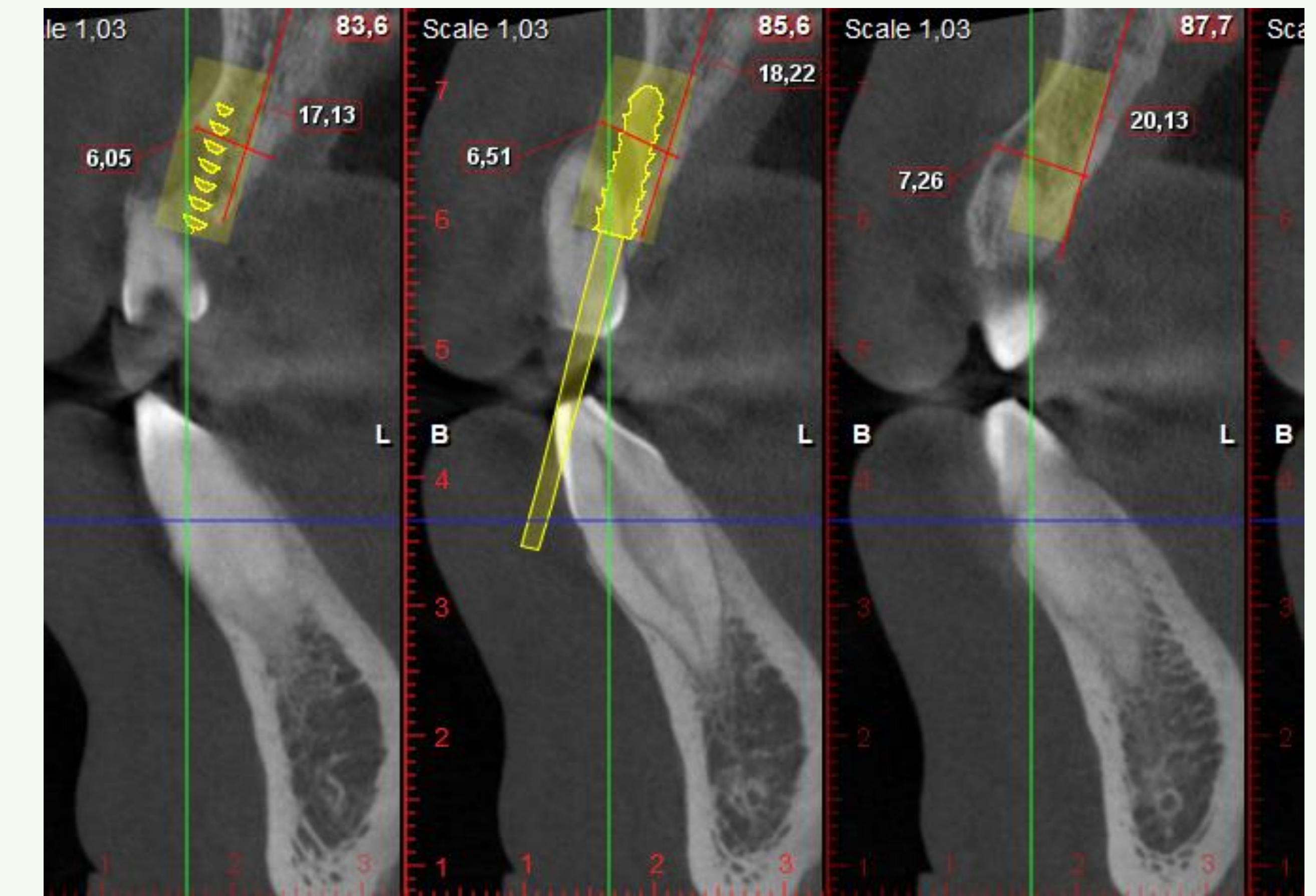
- Age: 27 years old

- Prosthesis done by a charlatan

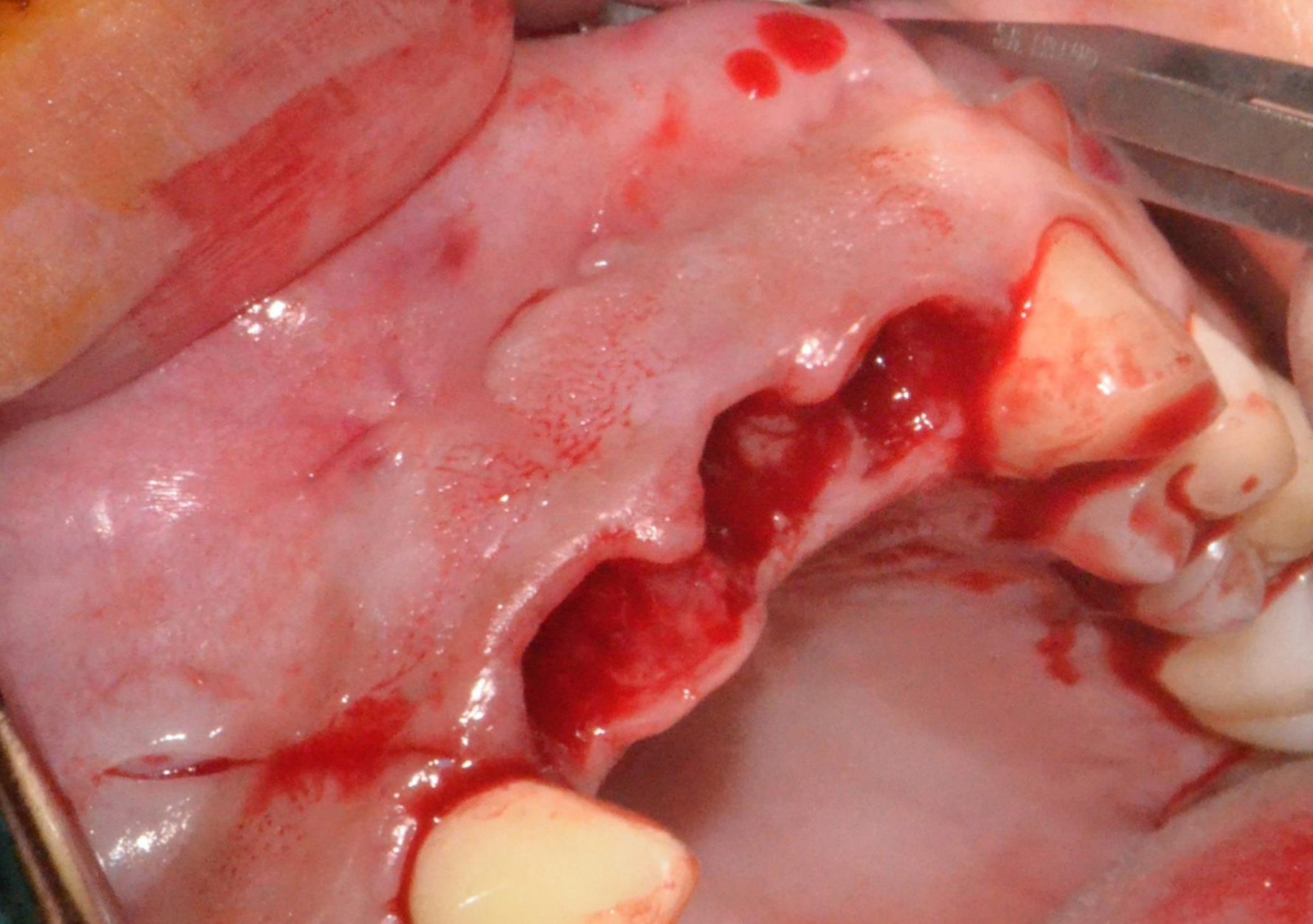
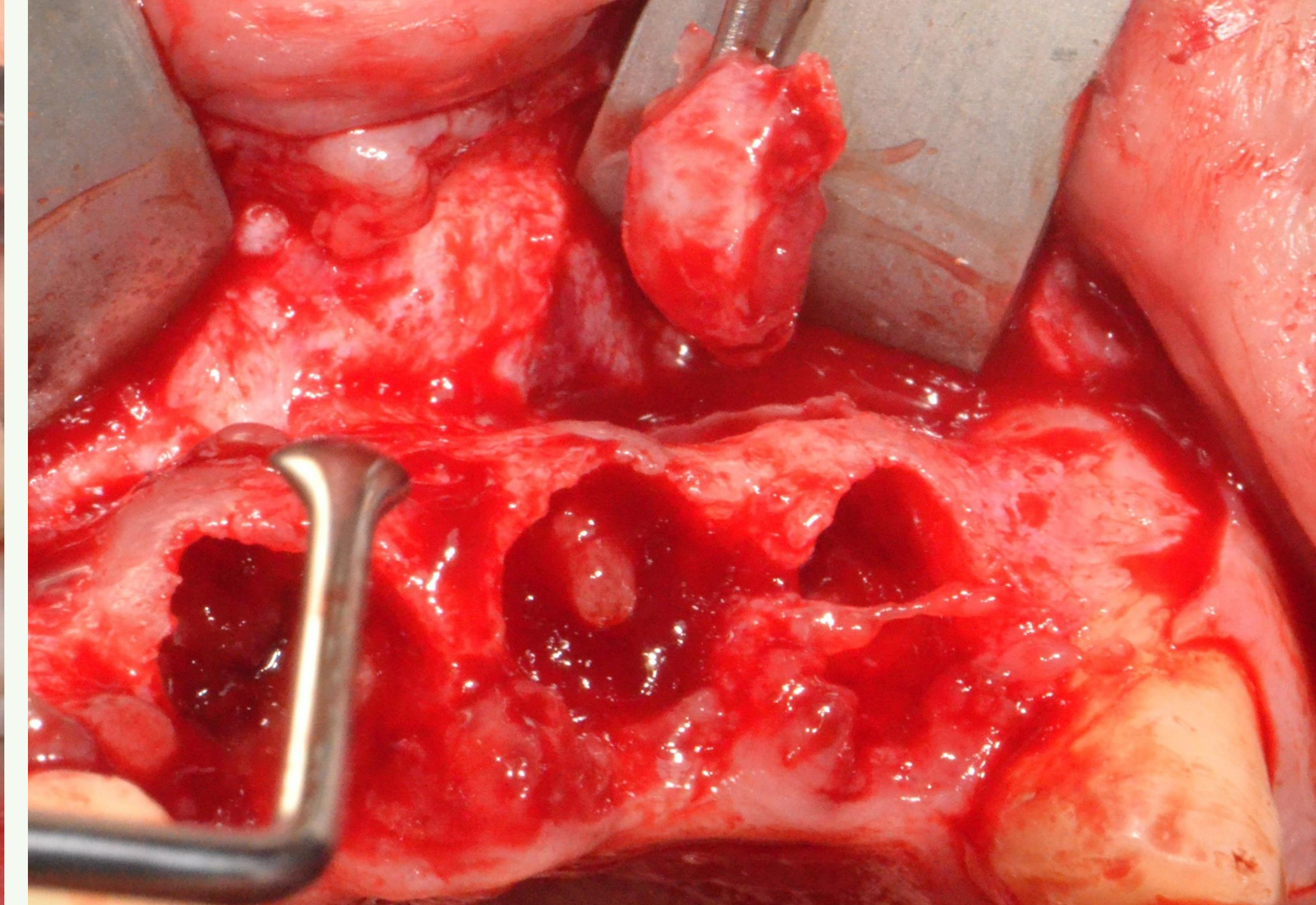
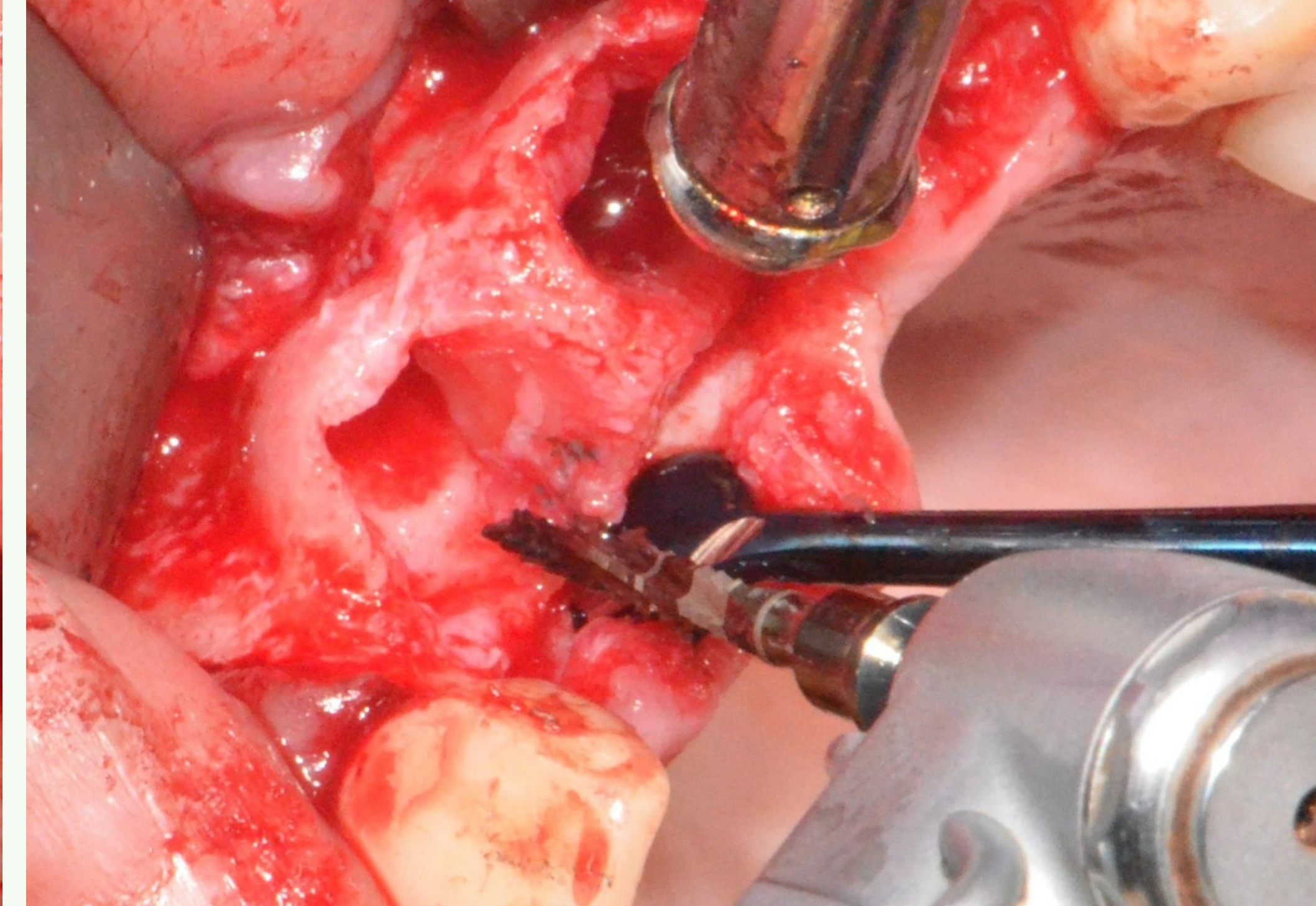
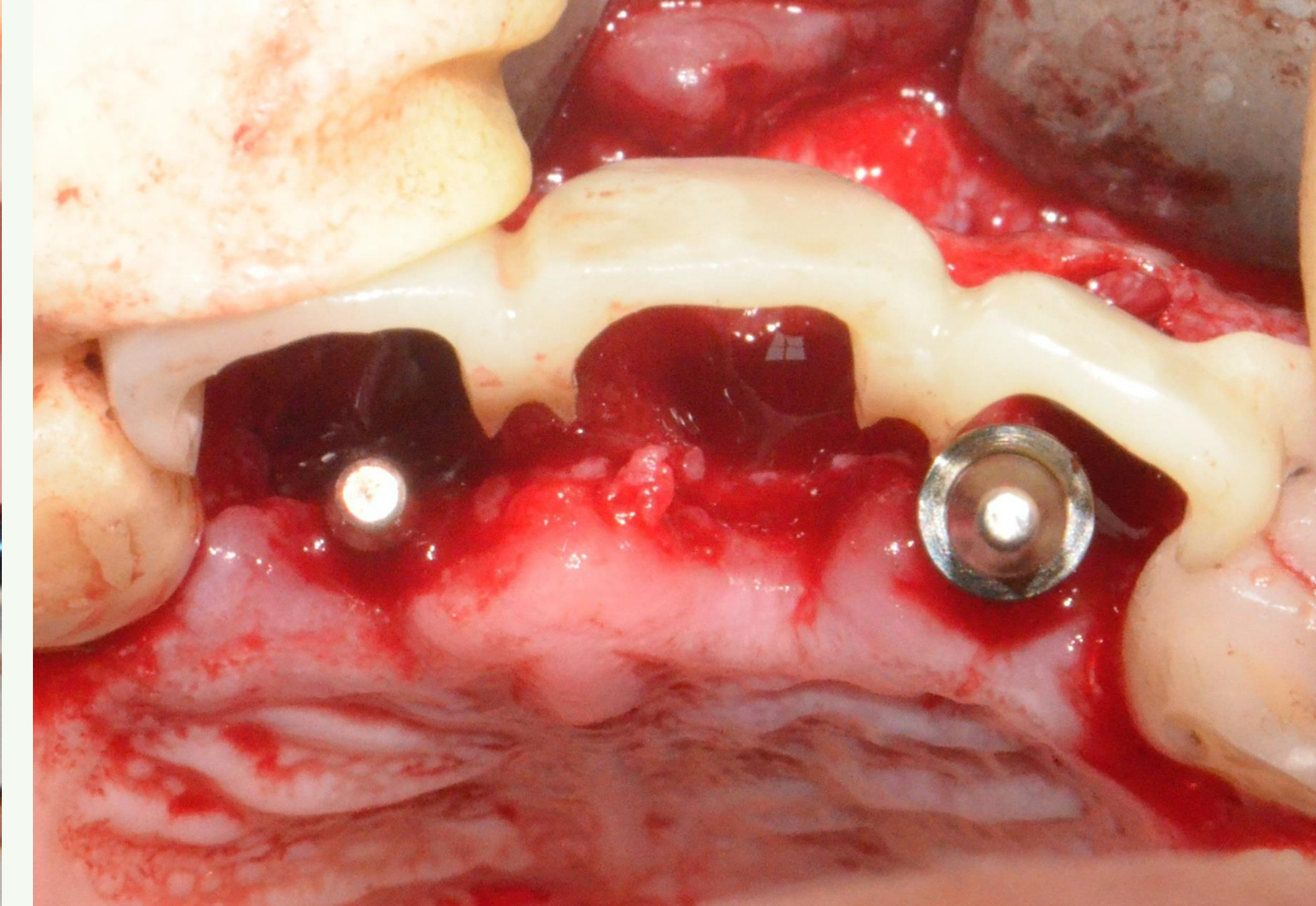
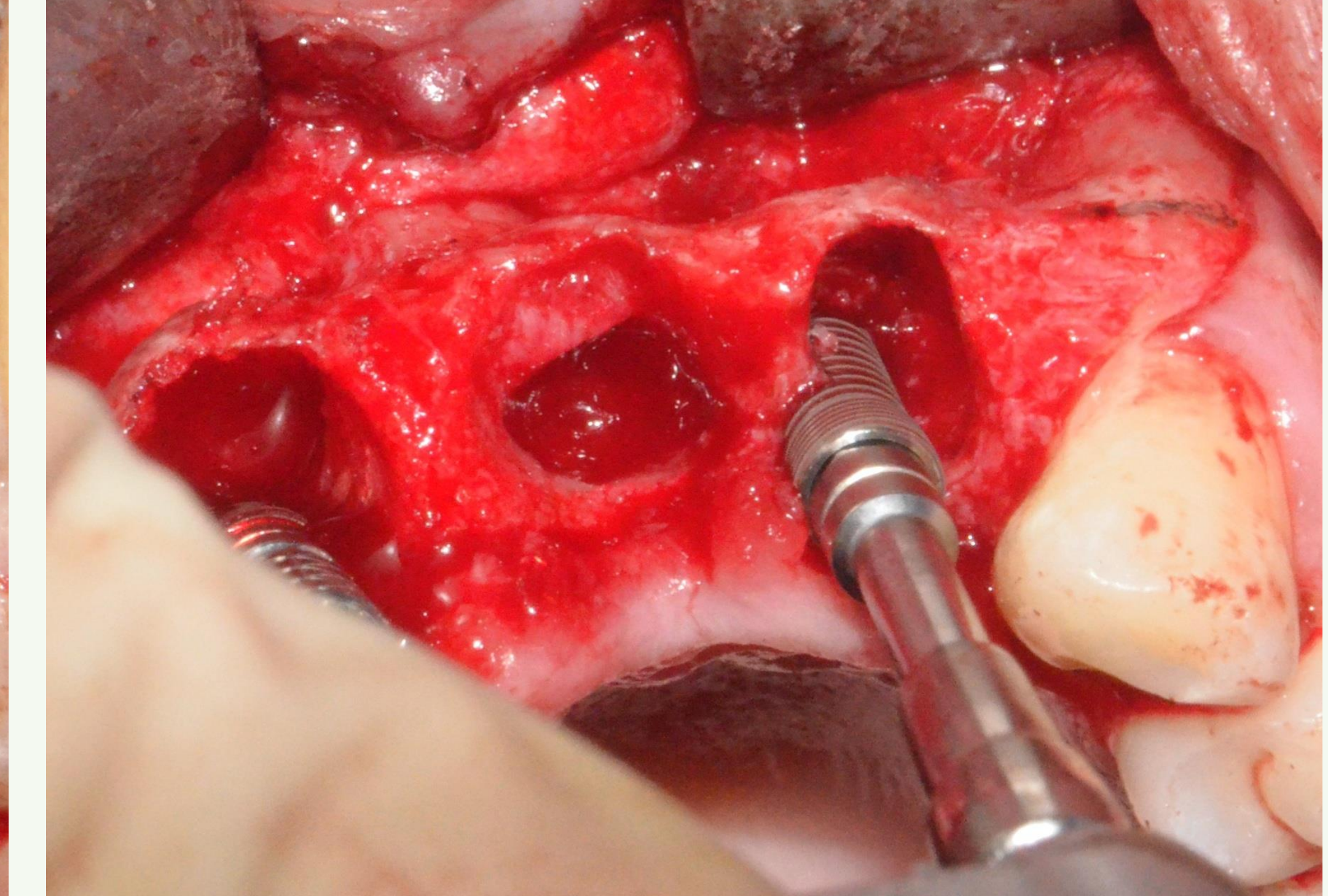
- Dental history: dental trauma



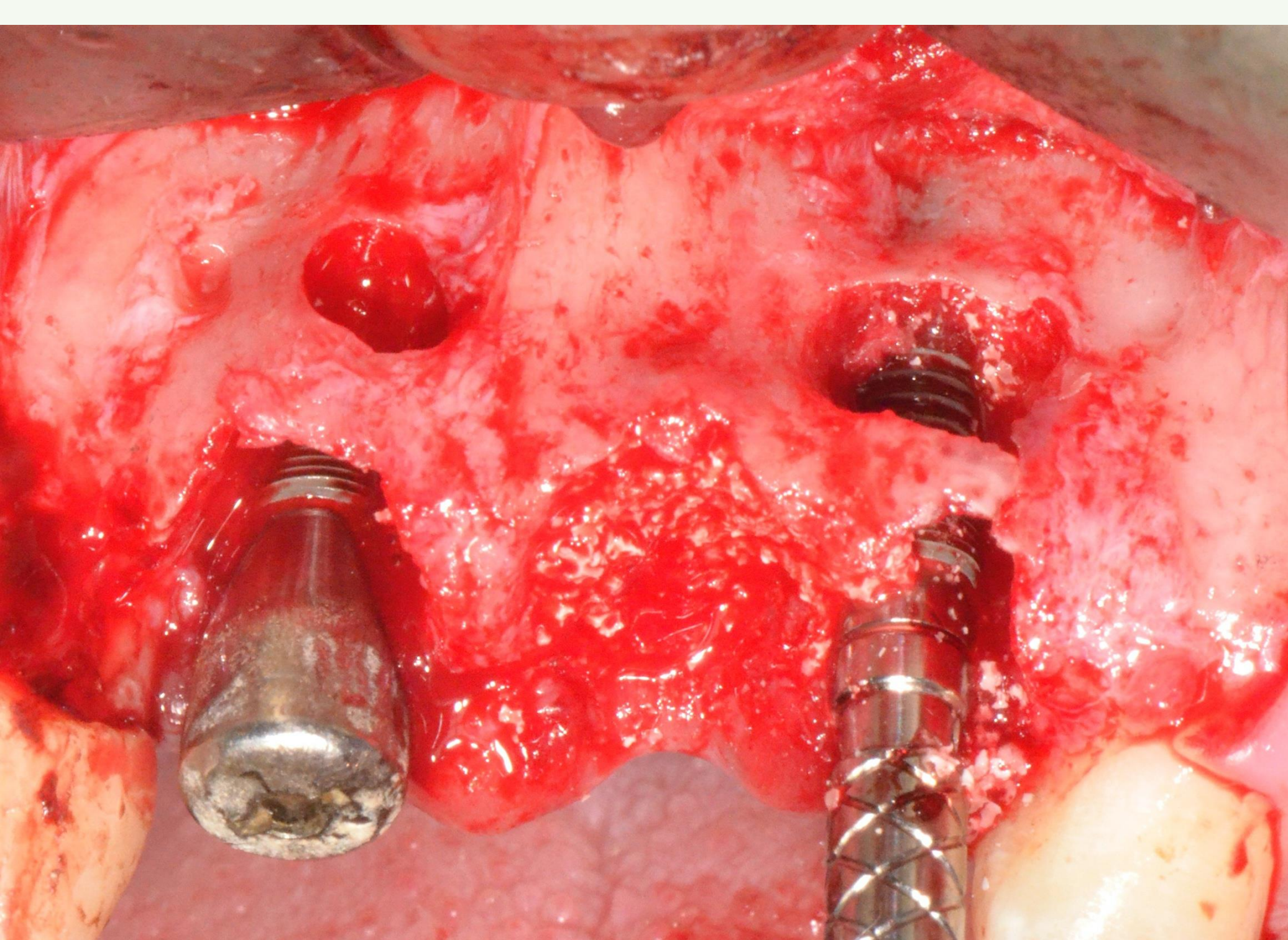
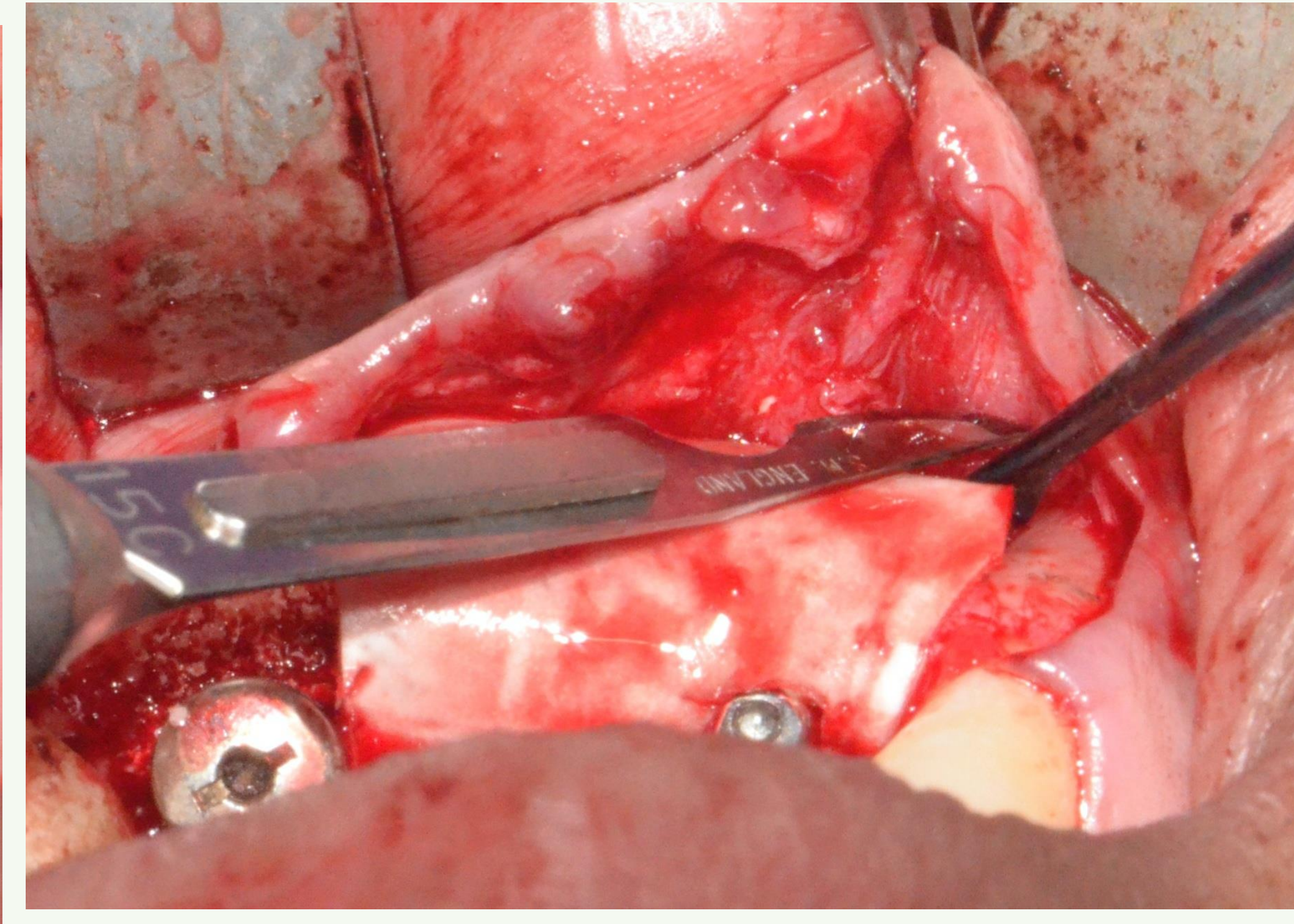
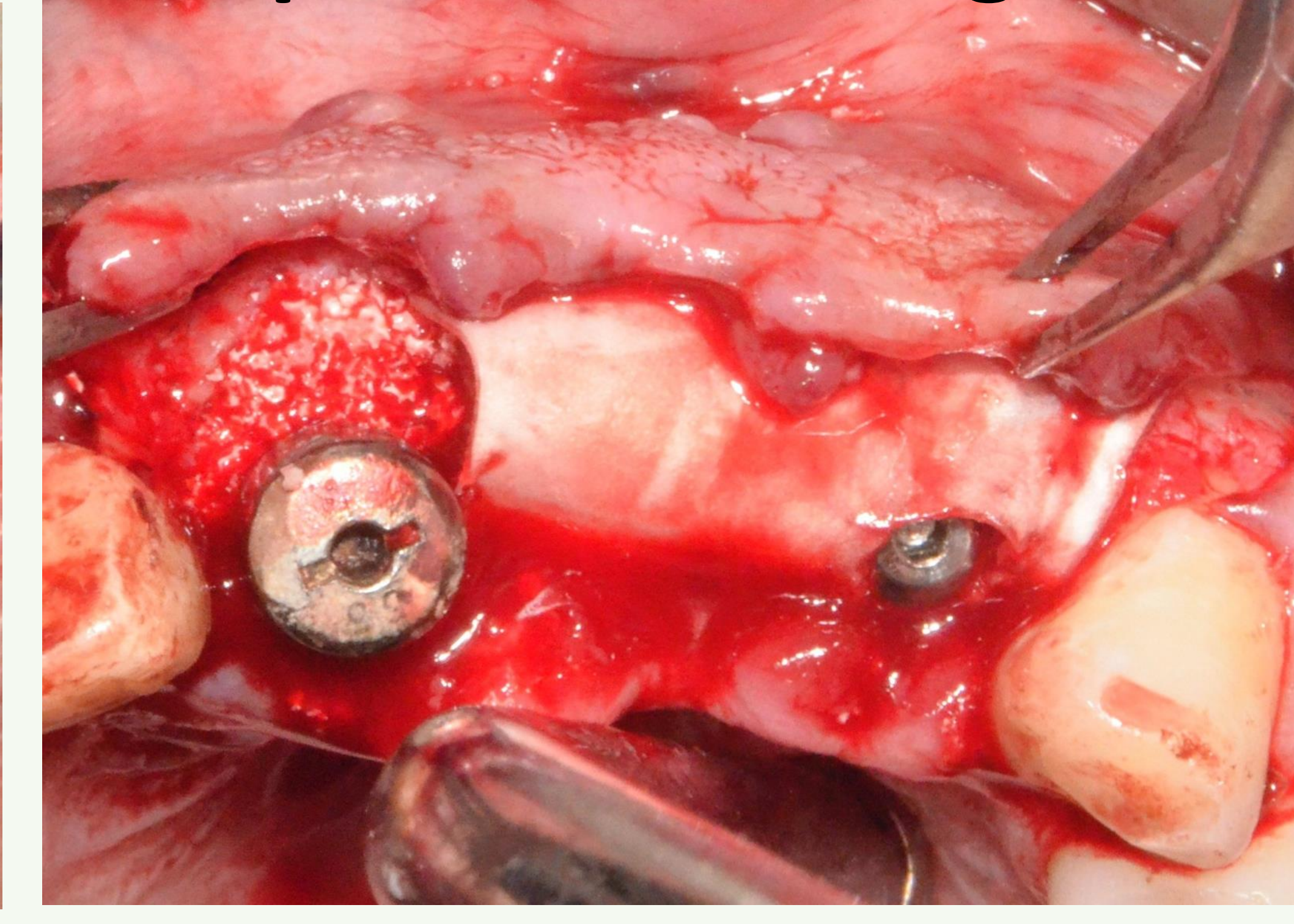
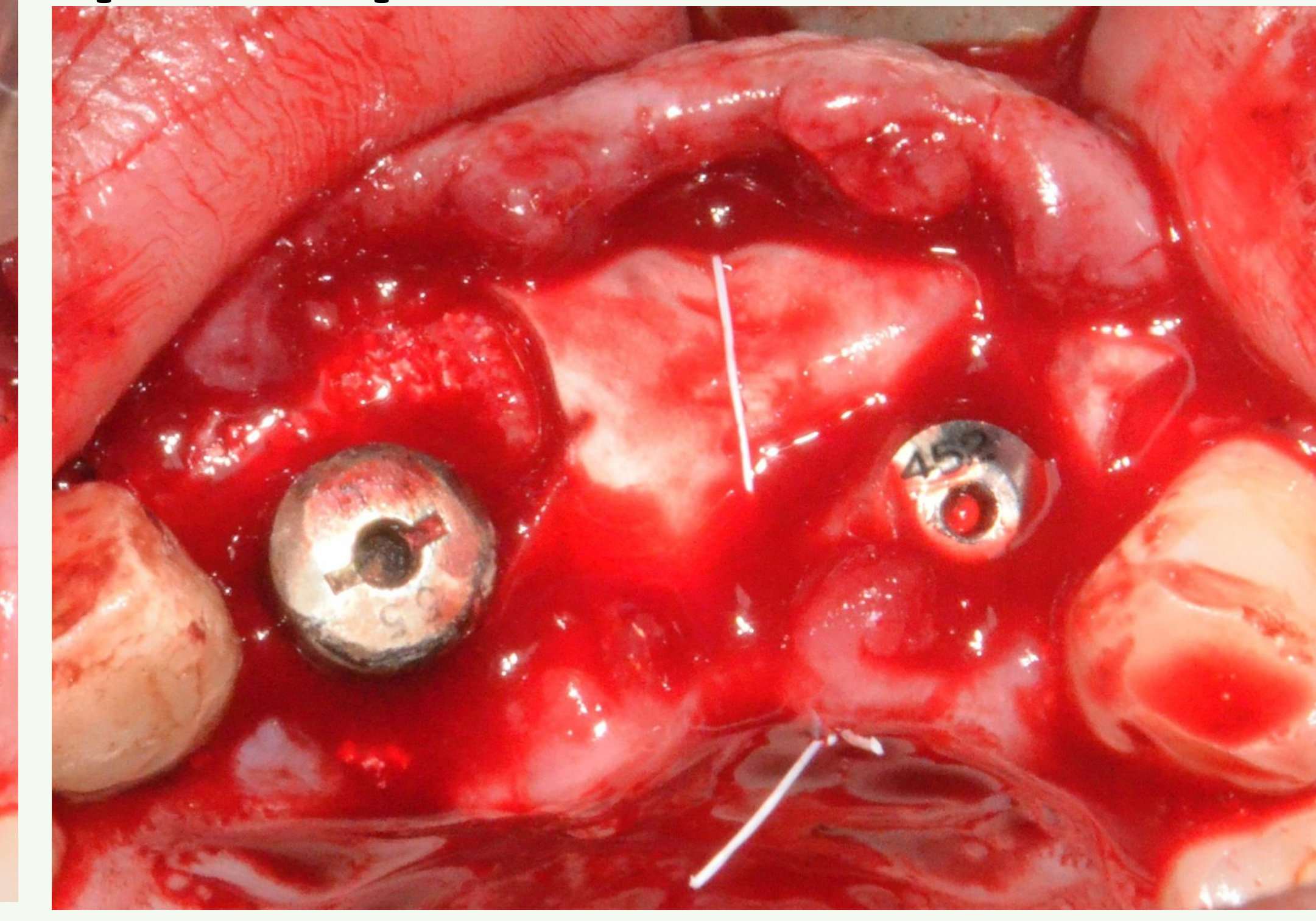
#12 virtual implant planning



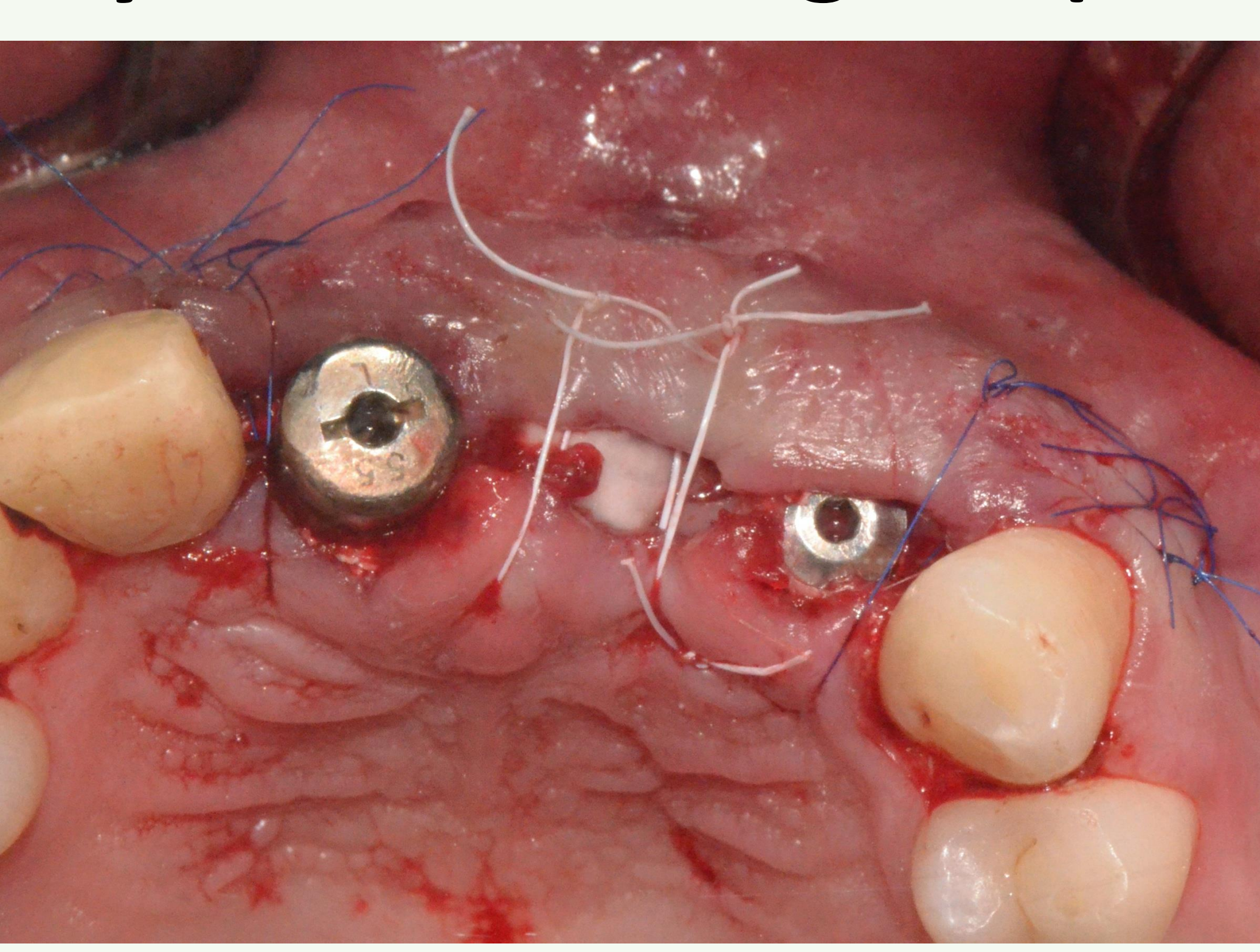
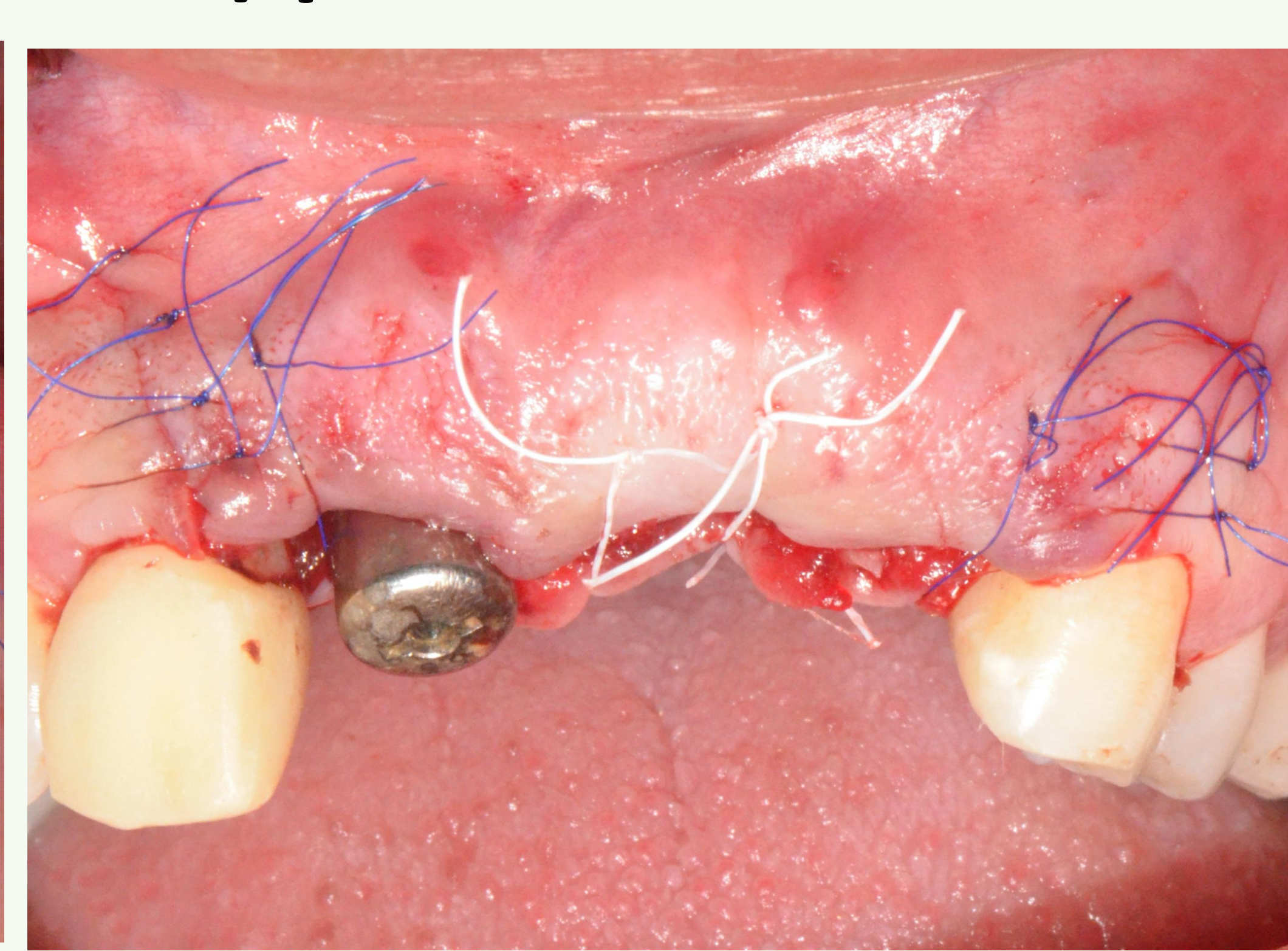
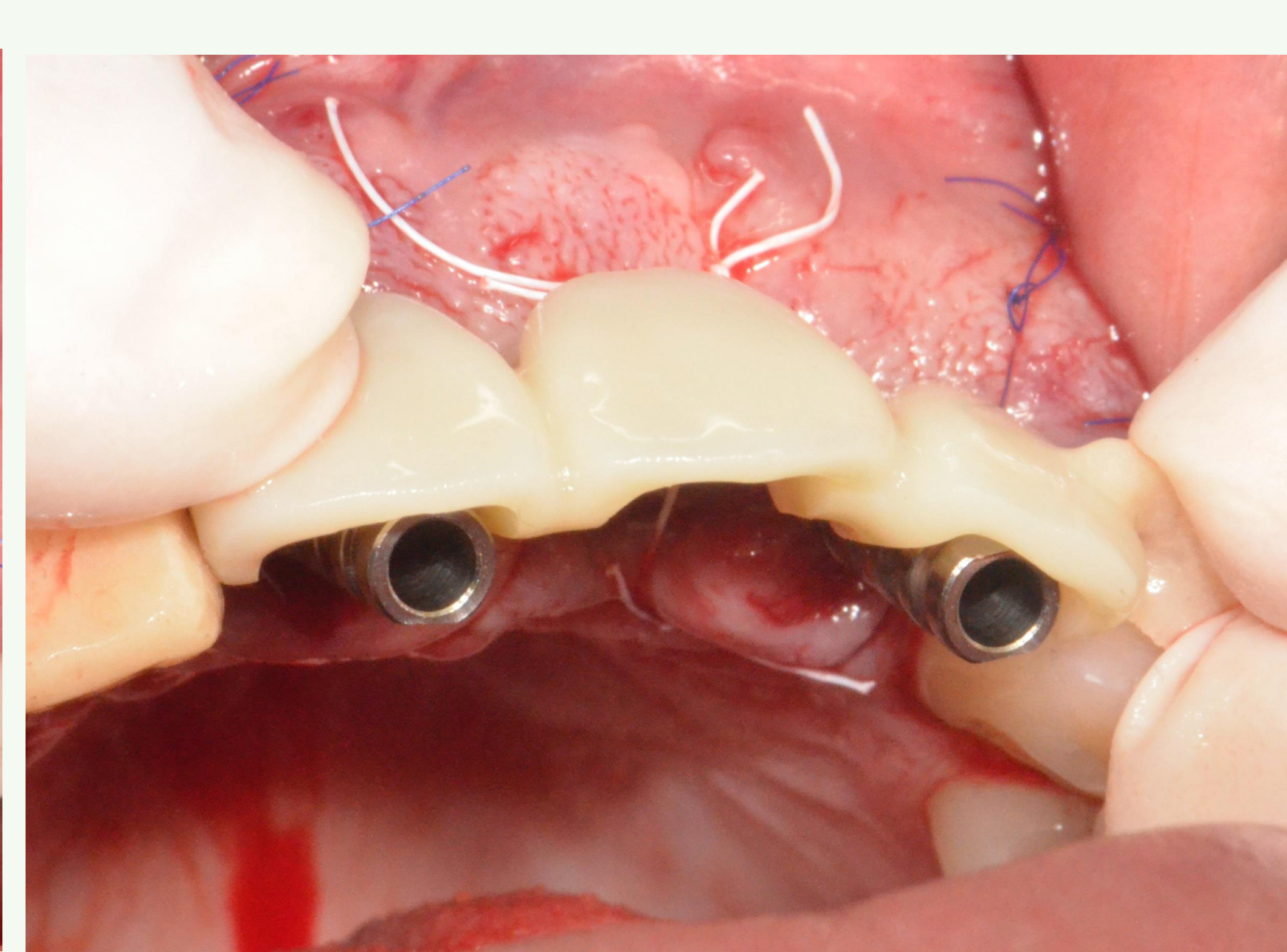
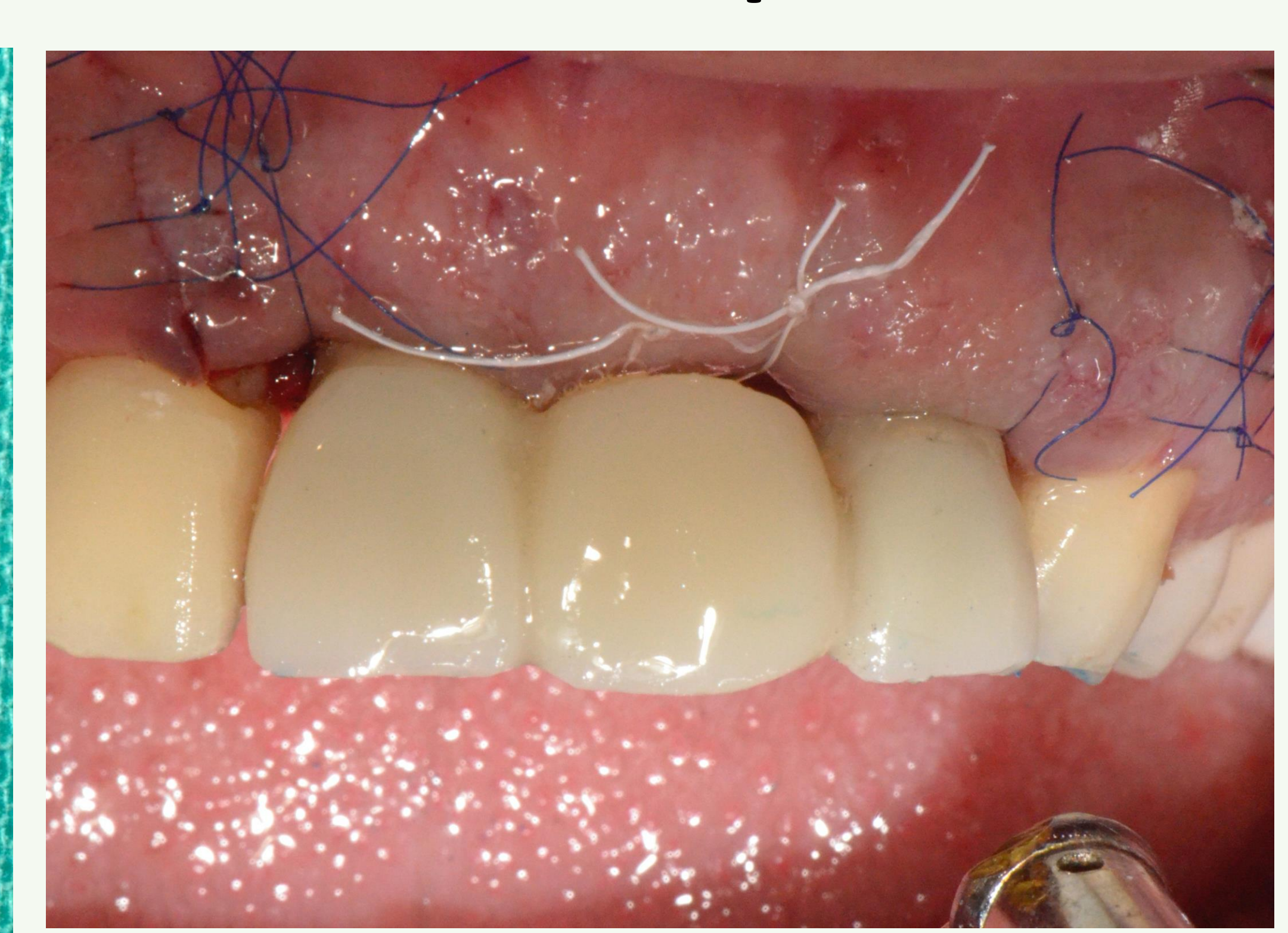
#22 virtual implant planning



Extraction, full-thickness flap elevation and debridement, Pre-fabricated provisional to guide implant placement



Synthetic bone graft (InRoad®) placed into the defect area and covered with a resorbable membrane after release of the periosteum



Sutures and Screw-retained temporary restoration fabrication

- **Results:**

At the one-year follow-up, immediate implant placement with GBR and non-submerged healing demonstrated promising clinical outcomes for maxillary anterior teeth with buccal bone defects. Further observation is needed to evaluate long-term changes in hard and soft tissues.

- **Conclusion:**

Immediate implantation and provisionalization are increasingly regarded as effective strategies for the anterior maxilla, meeting high aesthetic expectations and simplifying treatment protocols.

The method described in this case report—encompassing tooth extraction, implant placement, GBR, and provisionalization—can be efficiently completed in a single surgical session.

