RESISTA®

- **Introduction:**
- Dome-shaped CBCT images are often found when evaluating patients for a sinus lifting procedure, that are suggestive of cystic or pseudocystic lesions.
- The aim of the present work is to describe a rational approach to diagnosing and surgically treating these lesions.
- A case-report of sinus lifting procedure in presence of antral pseudocyst is also presented.
- Bibliographic reference: Tarquini G. Rialzo del seno mascellare per via laterale e pseudocisti antrale: caso clinico. Dental Cadmos, Volume 83, Issue 9, 2015, Pages 630-639, ISSN 0011-8524. https://doi.org/10.1016/S0011-8524(15)30095-7.

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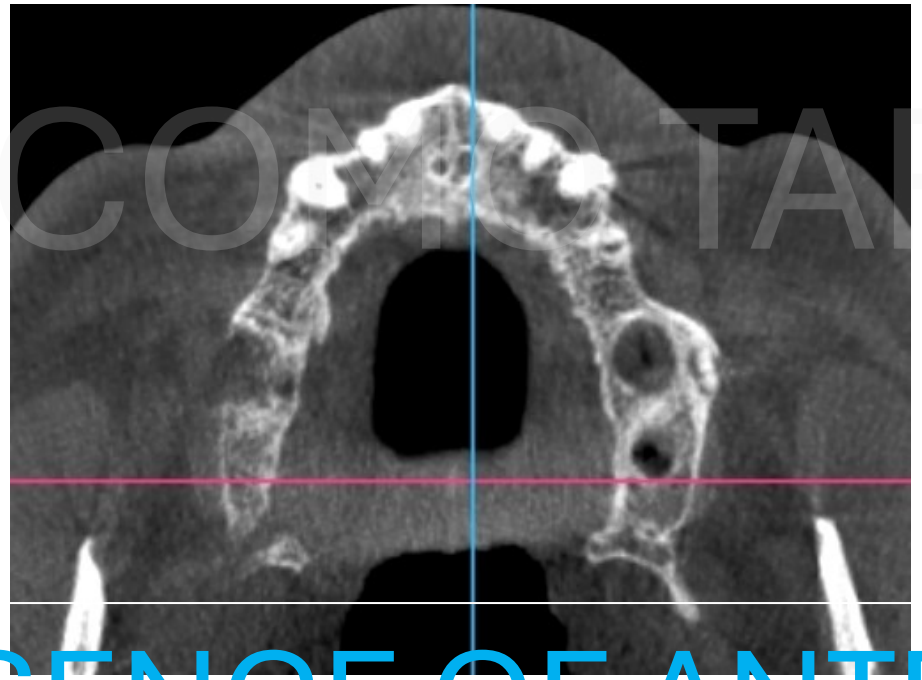
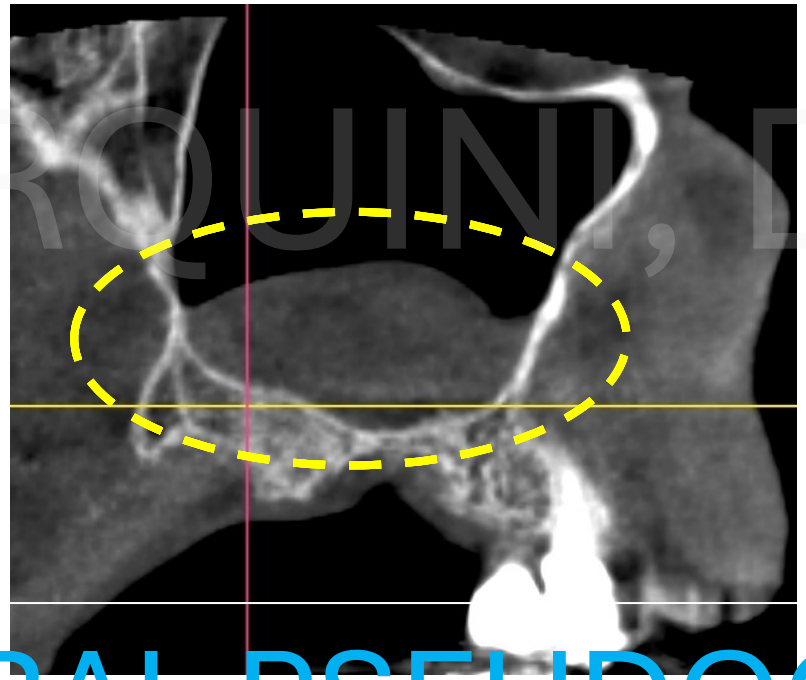
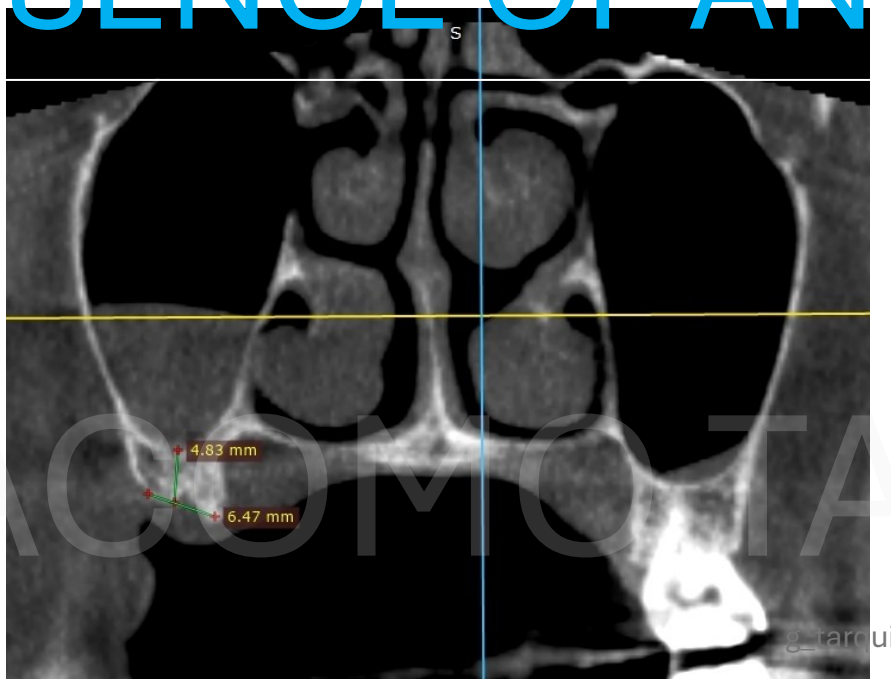
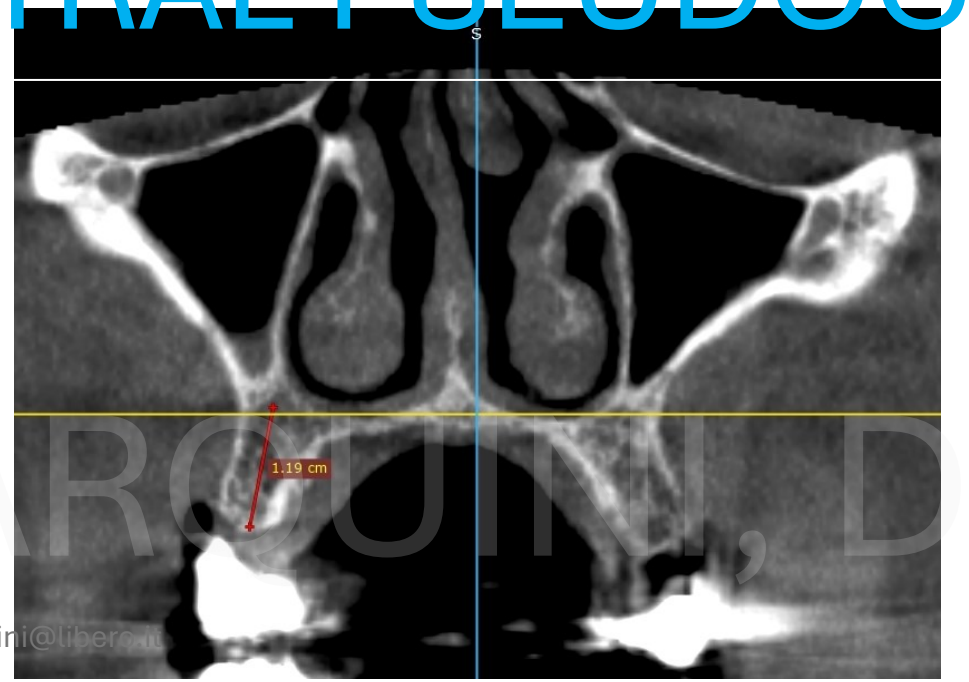
PRESENCE OF ANTRAL PSEUDOCYST









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CLINICAL ORAL IMPLANTS RESEARCH

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Importance of ENT assessment in stratifying candidates for sinus floor elevation: a prospective clinical study

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Key words: maxillary sinusitis, otolaryngology, sinus floor elevation

Abstract

Objectives: The aim of this article was to describe our experience in the field of preoperative ear, nose and throat (ENT) assessment in each candidate for (maxillary) sinus floor elevation (SFE) after the introduction of a systematic protocol. The protocol evaluates the sinus compliance by means of ENT preliminary examination with nasal fiberoptic endoscopy to identify all of the situations that may predispose to post-lifting complications, i.e. potentially irreversible (PIECs) and presumably reversible (PRECs) ENT contraindications to SFE, and to evaluate its impact on SFE success.

Material and methods: Patient candidates for SFE were carefully assessed by means of case-history collection, complete ENT evaluation with nasal fiberoptic endoscopy and imaging to detect PIECs, PRECs, or no ENT contraindications for SFE. In case of PRECs, SFE was postponed until complete clinical recovery. Impact of preoperative ENT assessment on SFE outcome was assessed by means of post-lifting telephonic interview and ENT evaluation.

Results: PRECs were detected and resolved before SFE was performed in 38.2% of our 34 patients; no intra- or post-lifting complications occurred in the patients with no ENT contraindications or PRECs.

Conclusions: The results of the study suggest that a careful multi-tasking preoperative management, including an ENT assessment with fiberoptic endoscopy and a radiological evaluation extended to the ostio-meatal complex, is very useful in candidates for SFE.

(Maxillary) sinus floor elevation (SFE) is a widespread and highly successful surgical procedure aimed at creating a mucoperiosteal pocket over the maxillary floor and beneath the Schneider's membrane in which to place the graft material or endo-osseous implants to rehabilitate the upper dental arch.

However, given the strict anatomical relationship between the maxillary floor and the overlying maxillary sinus and the fact that any surgical procedure may lead to a transient inflammatory reaction, the possibility of post-lifting infectious sequelae should be considered. In particular, SFE may impair physiological maxillary drainage into the middle meatus by inducing transient inflammatory peri-ostial swelling or other mechanisms predisposing to acute maxillary sinusitis (the most frequent post-lifting complication) (Timmenga et al. 2001) and possibly lead to bone graft loss (Buiter 1976).

Although the prompt post-surgical recovery of the maxillary mucosa with a rapid return to pre-operative sterility is frequent (Misch 1992, Timmenga et al. 2003), it must be pointed out that the "sinus compliance", which represents the intrinsic potential of recovery of the normal maxillary sinus homeostasis after SFE, depends on its baseline anatomo-physiological condition: the better the starting condition (high sinus compliance), the lower the risk of complications. Preoperative anamnestic, clinical and possibly radiological assessments, the invaluable instruments needed to define the sinus compliance, are therefore desirable to identify all of the situations that may predispose to post-lifting complications. Moreover, rare conditions significantly (and presumably irreversibly) impairing sinus drainage are responsible for an excessive risk of SFE failure, and need to be preoperatively detected as current contraindications to the procedure.

On the basis of these considerations, we drew up a series of guidelines (Pignataro et al. 2008) concerning ear, nose and throat (ENT) contraindications to SFE that distinguishes those that are potentially reversible (PRECs) and possibly emendable by means of adequate medical and/or surgical treatment

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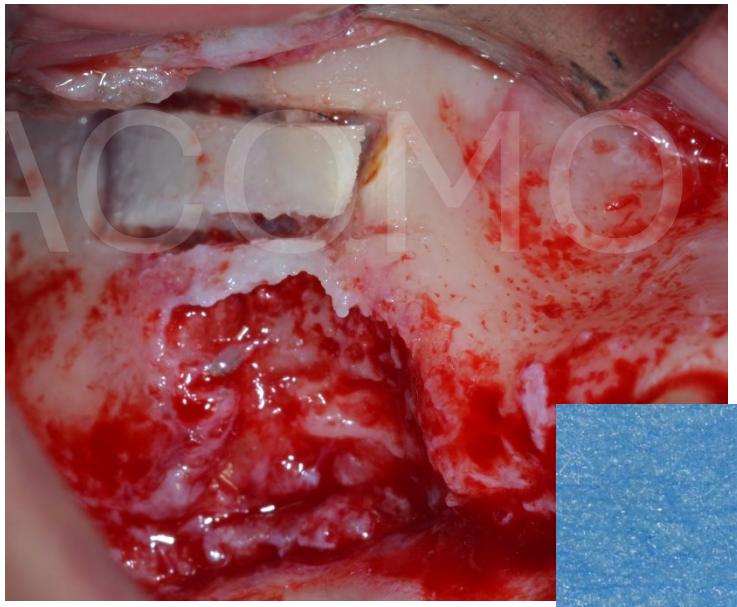
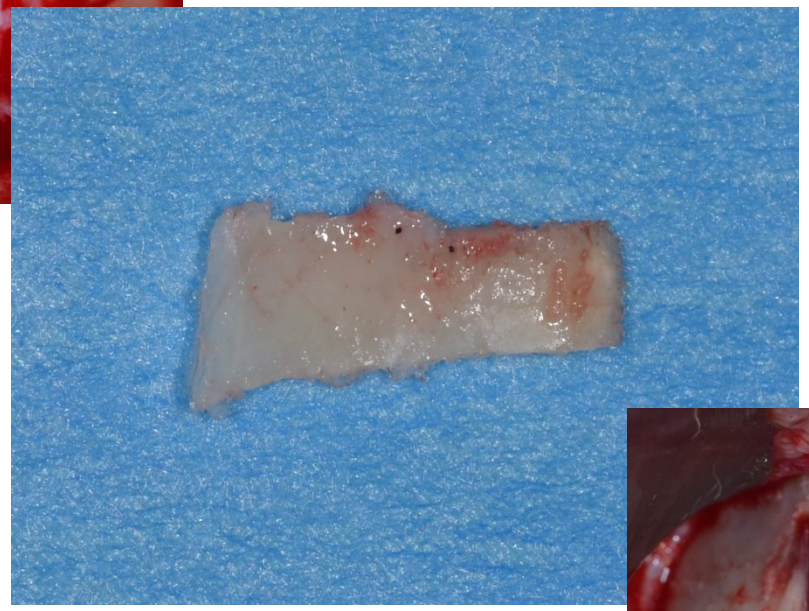
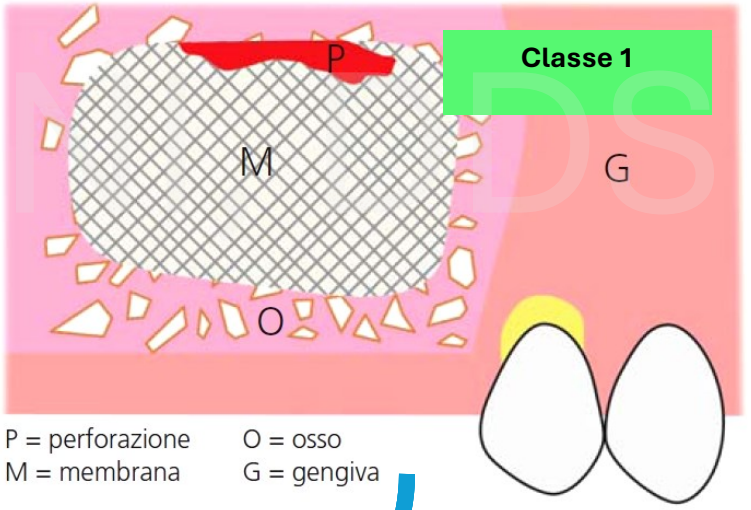
doi: 10.1111/j.1600-0501.2011.02371.x

Small antral cysts were not considered ENT contraindications too and, in such cases, we advised the oral surgeon to evacuate the cyst transantrally during the SFE procedure. Once an antral window has been created, the surgeon can use it to puncture the cyst by means of a small needle syringe and aspirate the fluid content. In patients with a favourable anatomy (i.e. complete nasal and middle meatal patency and a homolateral accessorial ostium that is large enough to allow the introduction of a thin flexible fiberoptic endoscope), an ENT specialist can assist the surgeon by directly attesting the deflation of the cyst.

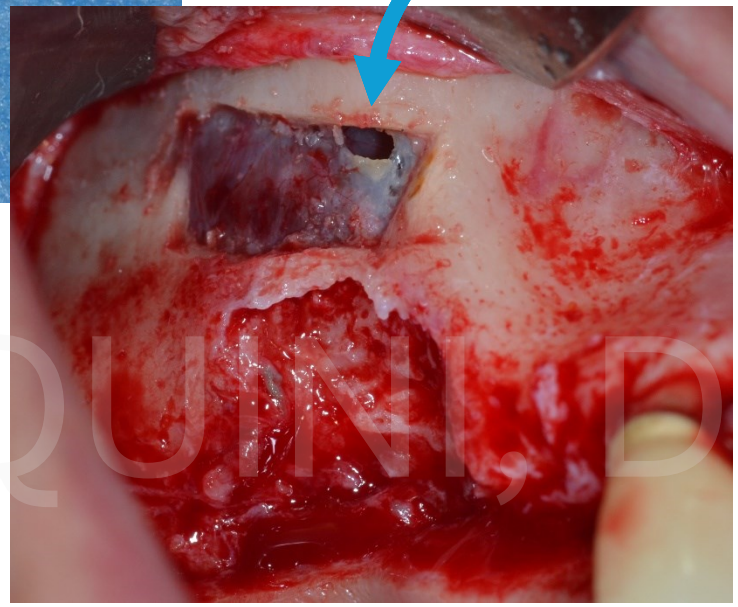






P = perforazione
M = membrana
O = osso
G = gengiva

CLASS 1 MEMBRANE PERFORATION



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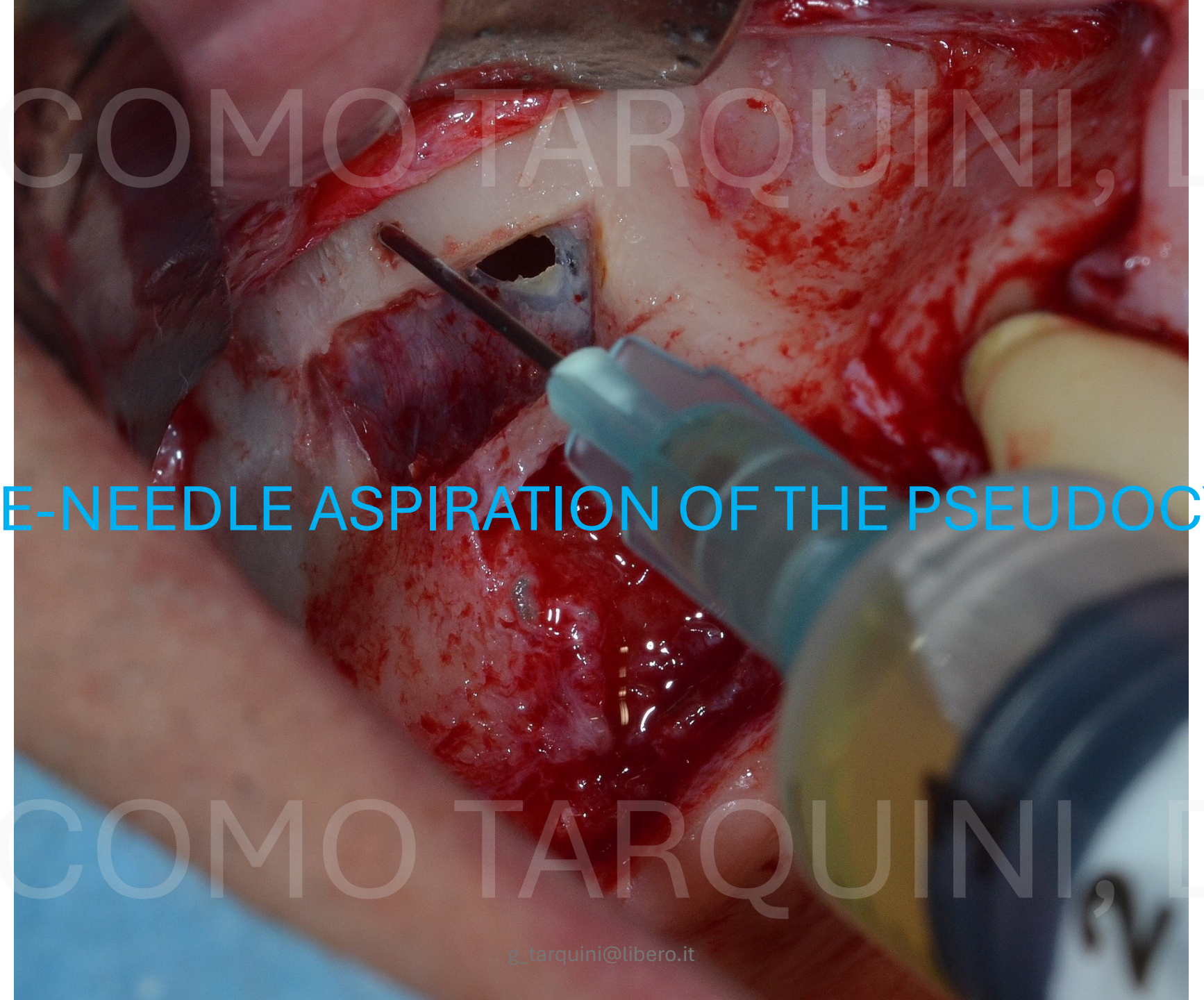
FINE-NEEDLE ASPIRATION OF THE PSEUDOCYST



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CASO CLINICO

Chirurgia orale

Rialzo del seno mascellare per via laterale e pseudocisti antrale: caso clinico

Maxillary sinus lifting procedure in the presence of an antral pseudocyst: a case report

G. Tarquini*
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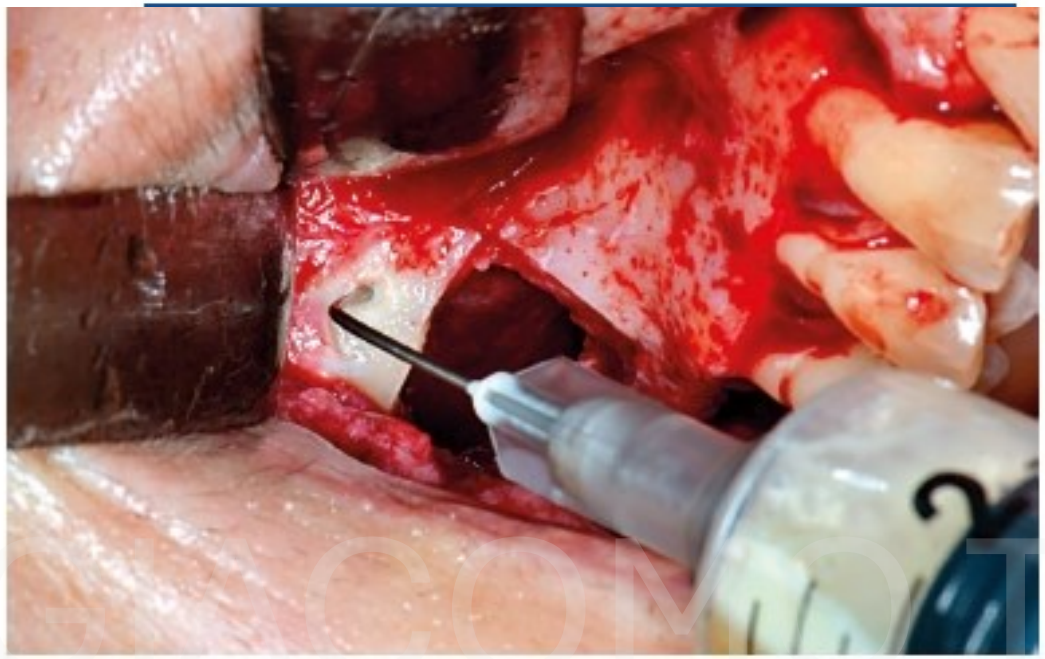

Fig. 10 Controapertura craniale e agoaspirazione della pseudocisti

1. A perforation through the vestibular wall of the maxillary sinus was made 5 mm over the upper side of the bony window in order to suck out the liquid contained in the neoformation

2. The liquid extraction consented to reduce the internal pressure of the cyst thus diminishing the dimension of the lesion and the risk of laceration during the lifting of the scheiderian membrane

3. The sinus membrane was then gently lifted from the bony floor

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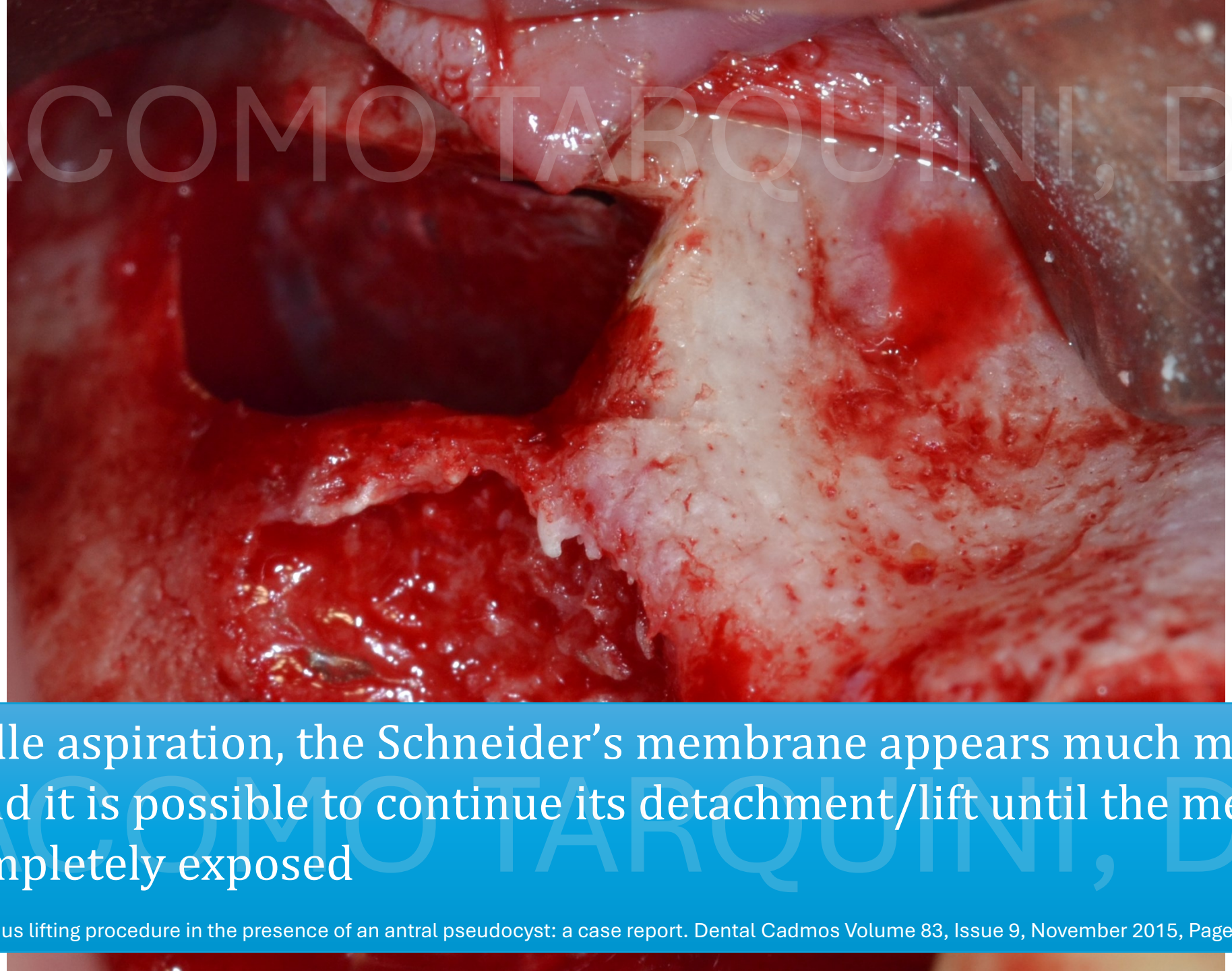
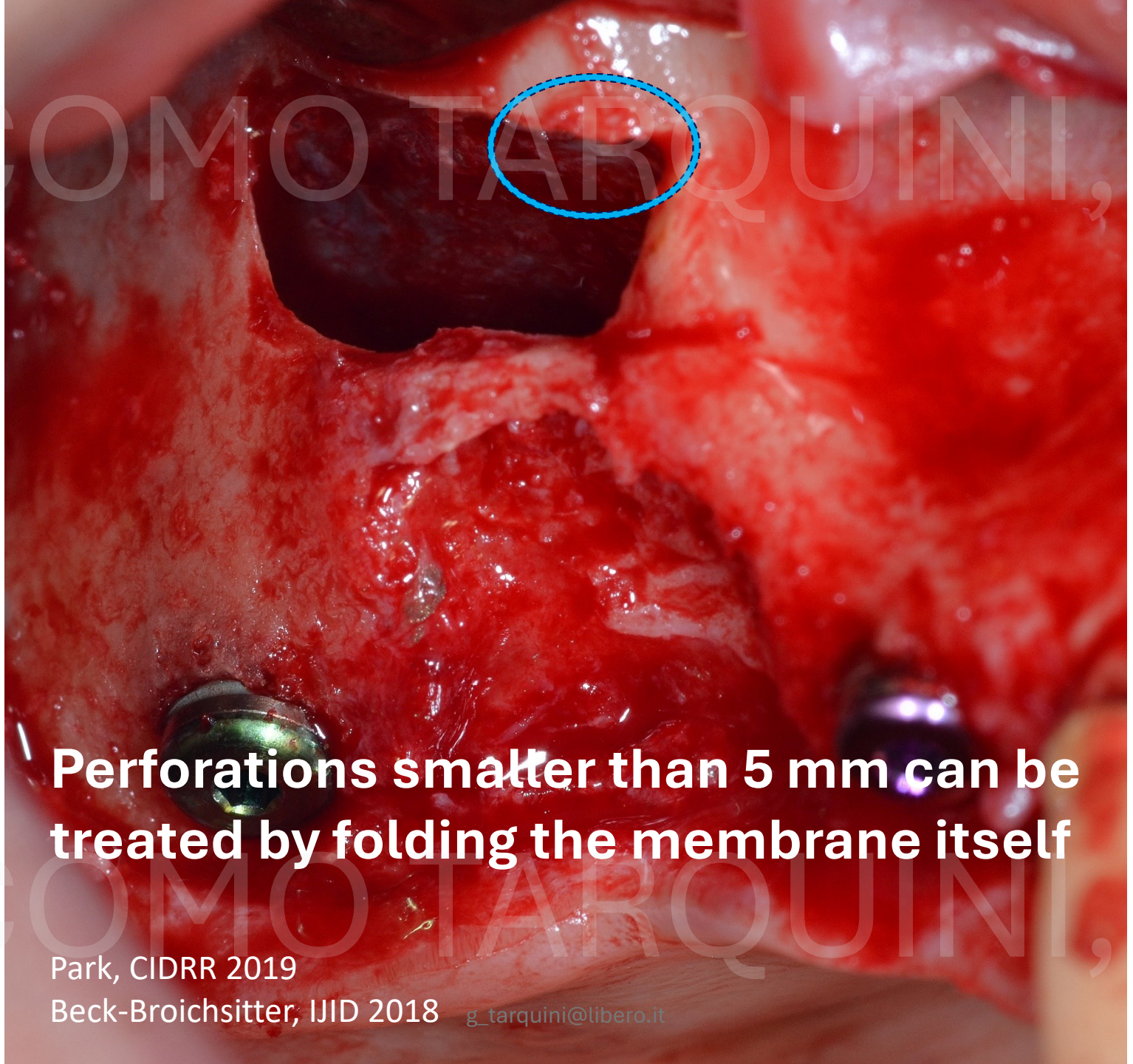


After needle aspiration, the Schneider's membrane appears much more relaxed and it is possible to continue its detachment/lift until the medial bone wall is completely exposed

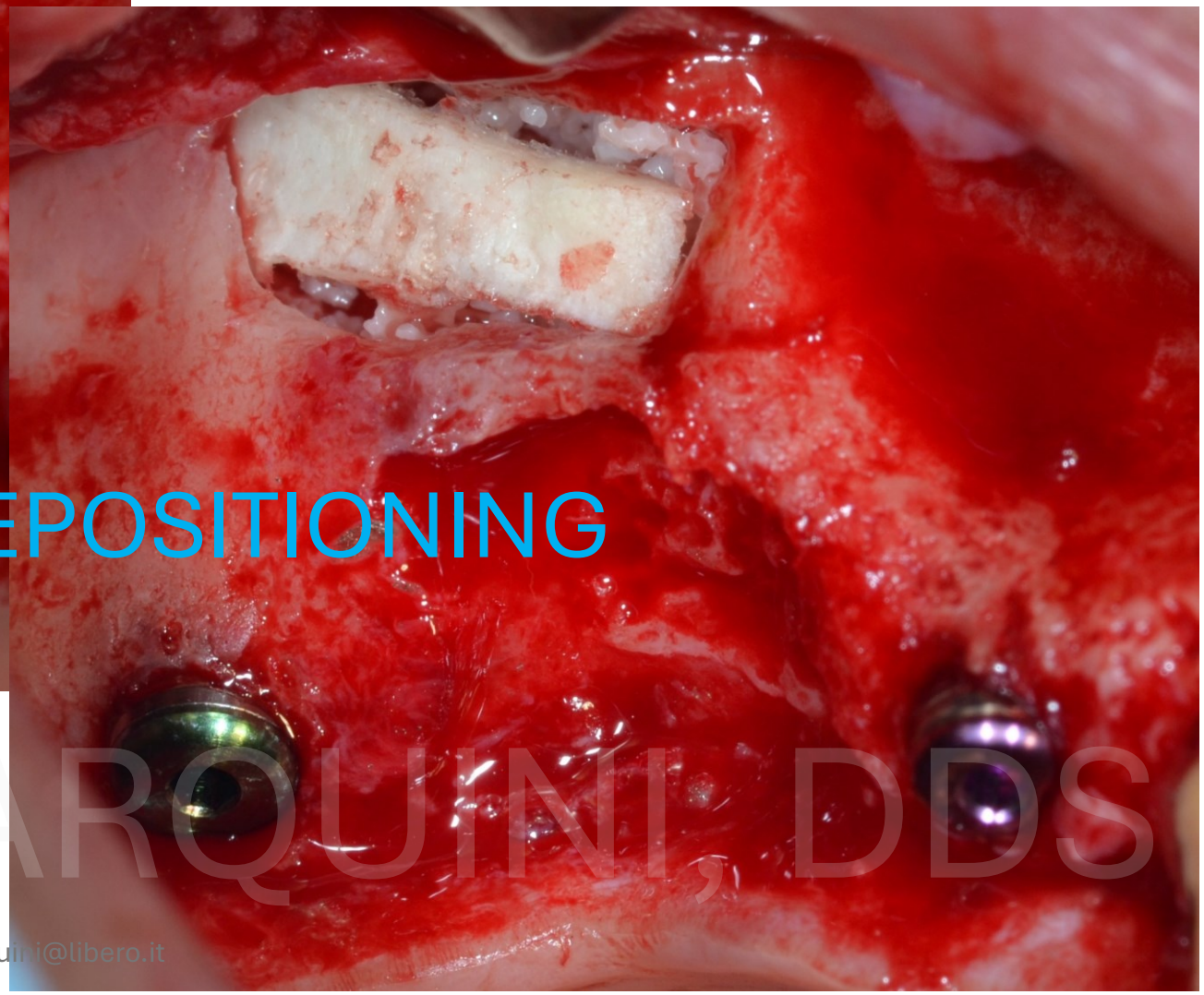
Tarquini G. Maxillary sinus lifting procedure in the presence of an antral pseudocyst: a case report. Dental Cadmos Volume 83, Issue 9, November 2015, Pages 630-639



Perforations smaller than 5 mm can be treated by folding the membrane itself

Park, CIDRR 2019

Beck-Broichsitter, IJID 2018



BONY LID REPOSITIONING

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Rialzo del seno mascellare per via laterale e pseudocisti antrale: caso clinico

Maxillary sinus lifting procedure in the presence of an antral pseudocyst: a case report

G. Tarquini*
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for the outermost part (figs. 13 and 14). Once the grafting is completed, the bony trapdoor is repositioned on the antrostomy according to the technique known as "bony window repositioning" [14]. The trapdoor remains *in situ* resting on the underlying grafting material without the aid of sutures or glues surgical (cyanoacrylate or fibrin glue) (fig. 15). Once healing has taken place, it will be possible to highlight a perfectly corticalized area during the surgical return phase. The last operative stage consists of the suture

Fig. 14 Innesto di biomateriale (granulometria: 0,5-1 mm)

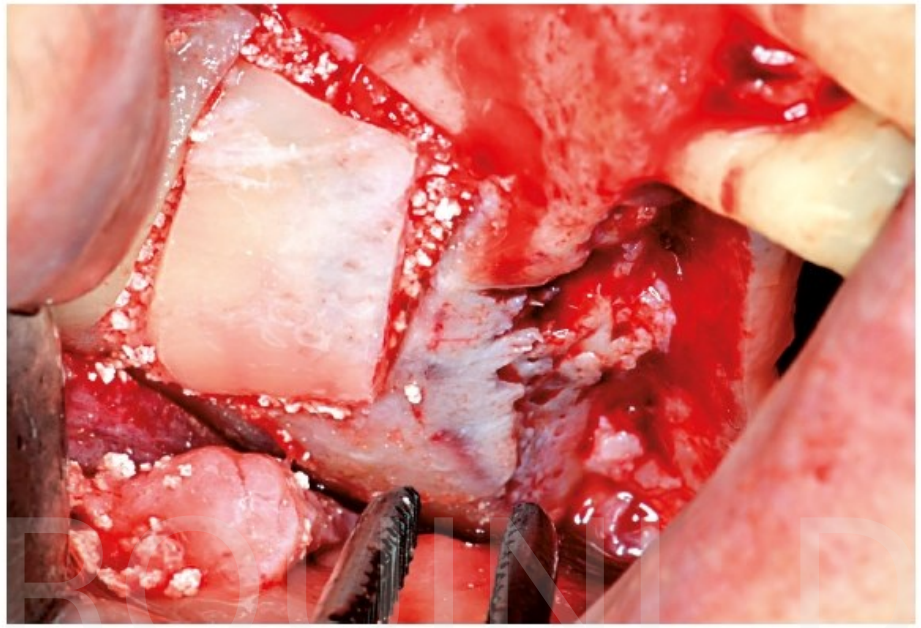

Fig. 15 Botola ossea riposizionata a copertura del biomateriale innestato

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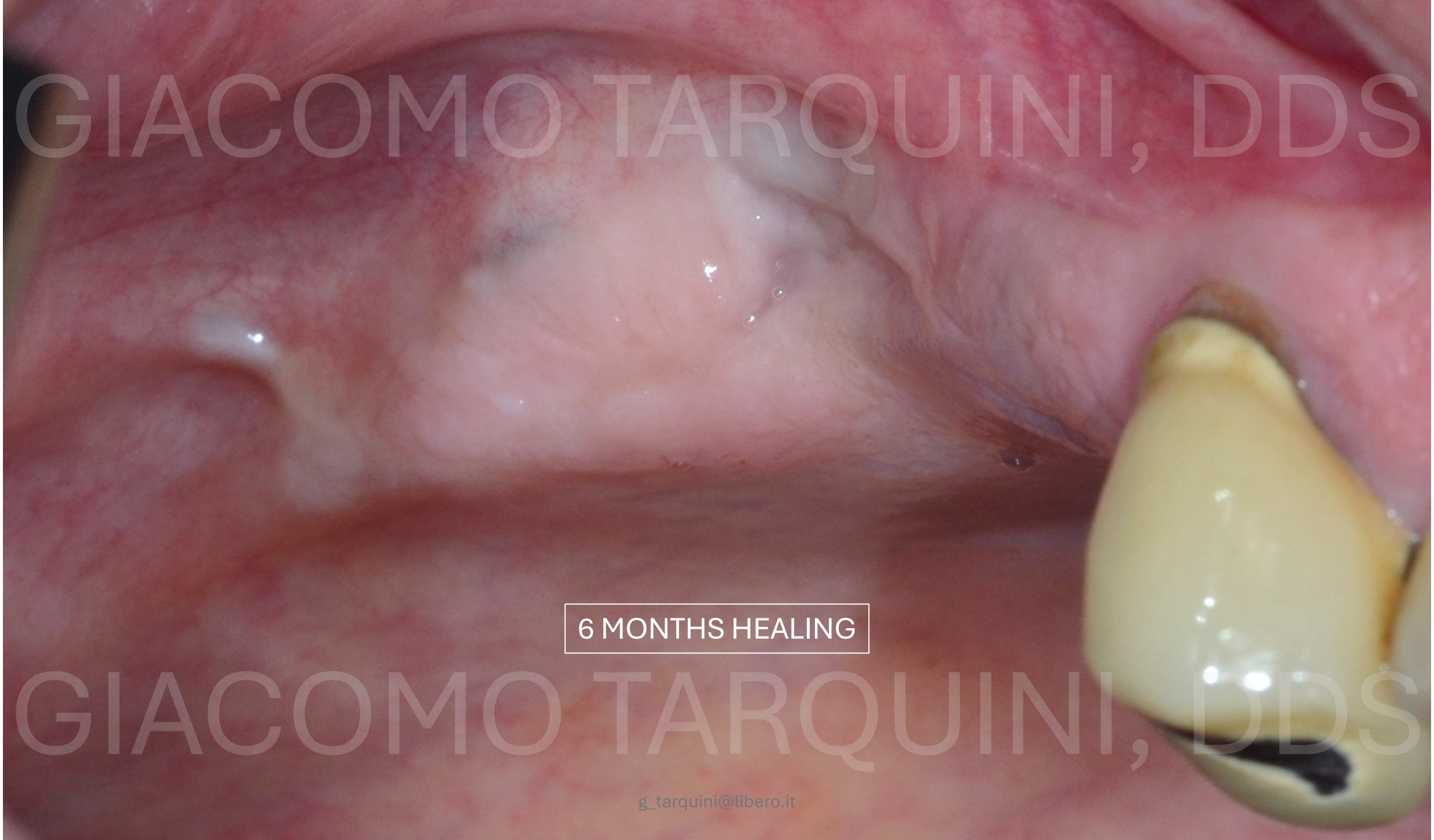
GIACOMO TARQUINI, DDS
6 MONTHS HEALING
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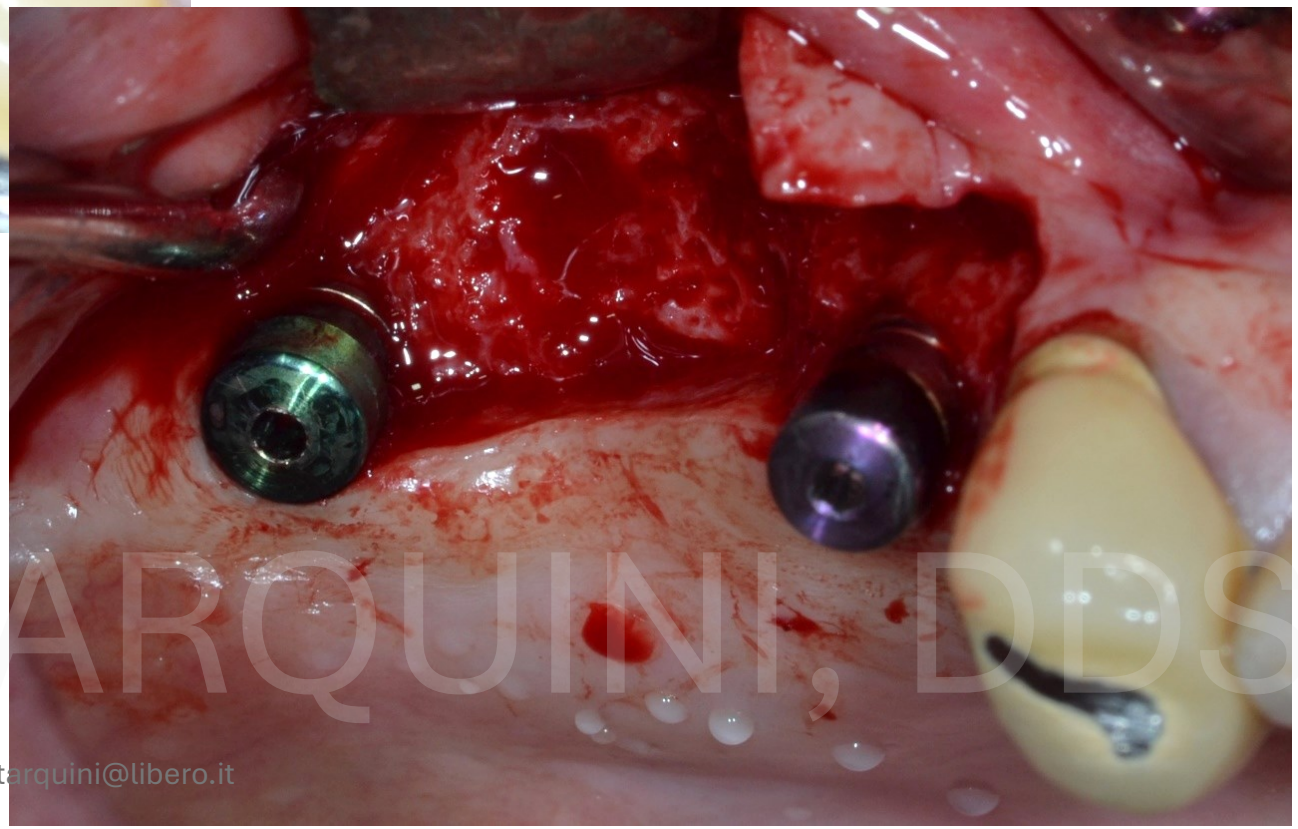

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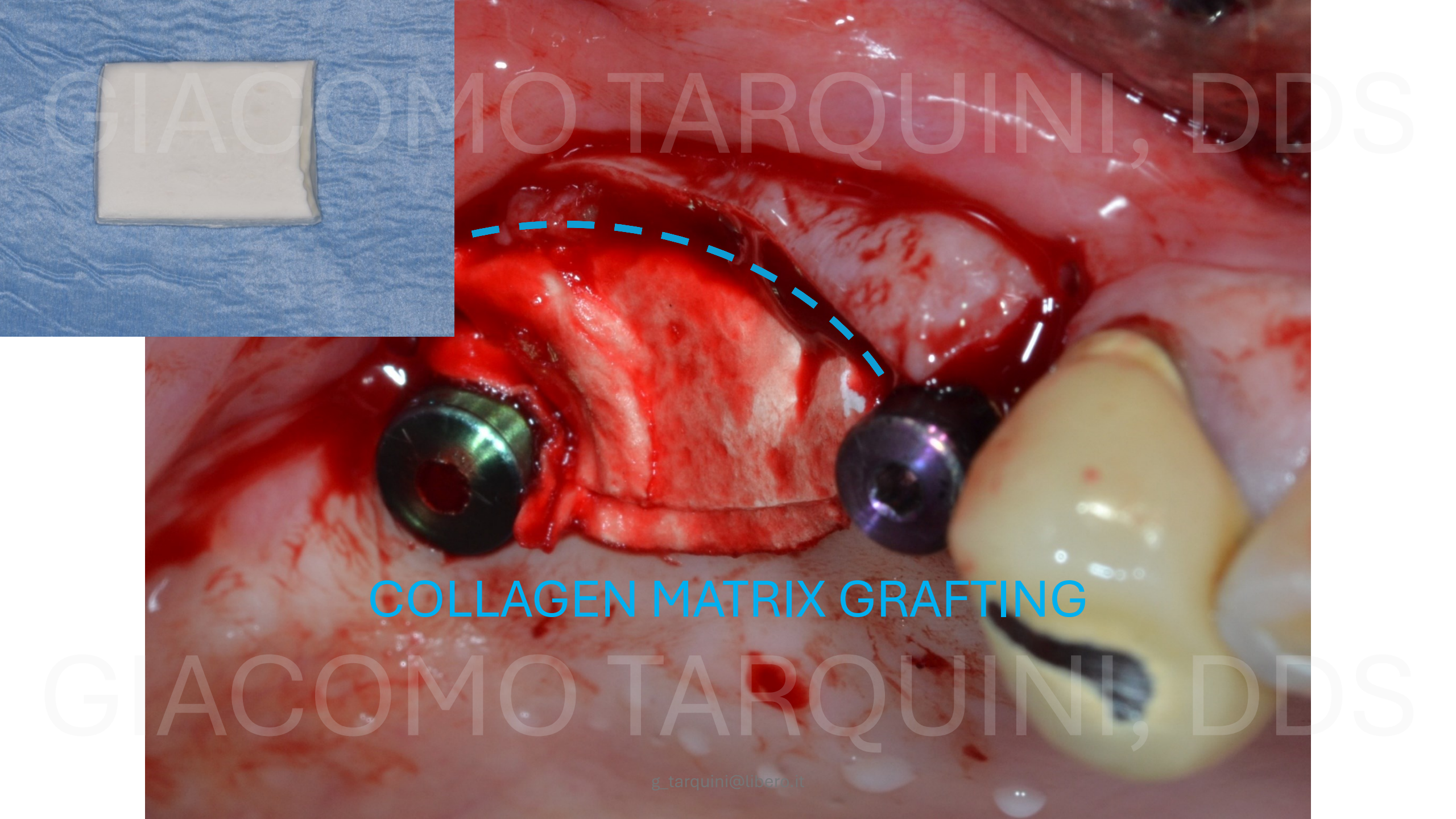

Coronally Advanced Flap Technique to Treat Class I and II Gingival Recession in Combination with Connective Tissue Graft or Equine Collagen Matrix: A Retrospective Study

Giacomo Tarquini, DDS

This retrospective study aimed to compare the effectiveness of an equine collagen matrix (ECM) with that of a subepithelial connective tissue graft
ss I and II gingival recessions treated with a
chnique. Records of 50 consecutive patients
probing depth, keratinized tissue width, and
d been recorded at baseline and at the 1-year
ts that achieved complete root coverage
the investigated parameters, ECM and CTG
d in association with a CAF technique. Int J
017;37:e217–e223. doi: 10.11607/prd.3144

Gingival recession is defined as the apical displacement of the gingival margin in relation to the cementoenamel junction (CEJ) and the resulting exposure of the root surface.[1] Patients affected by gingival recession complain about their esthetics, especially when the recession af-

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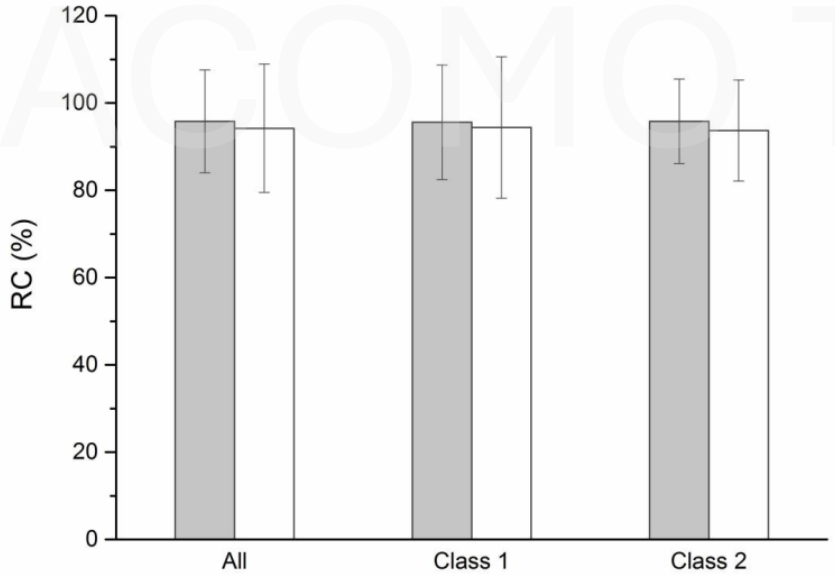
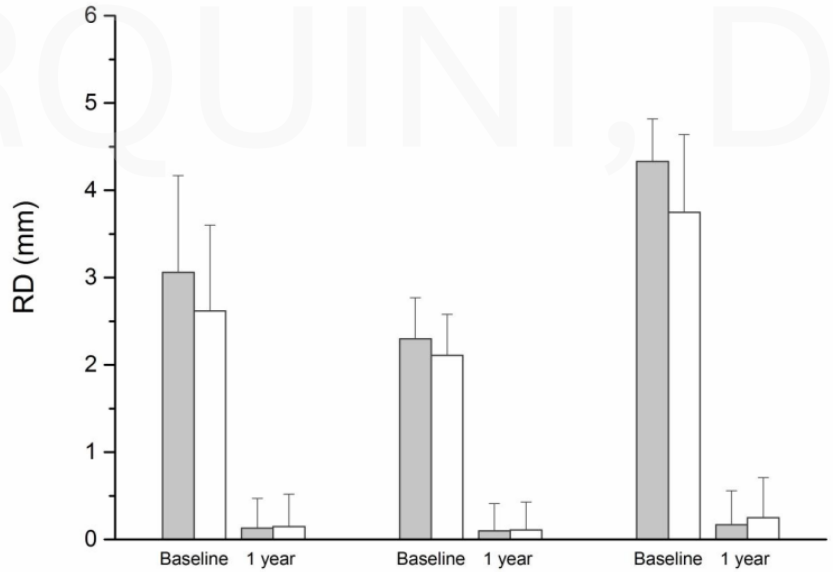
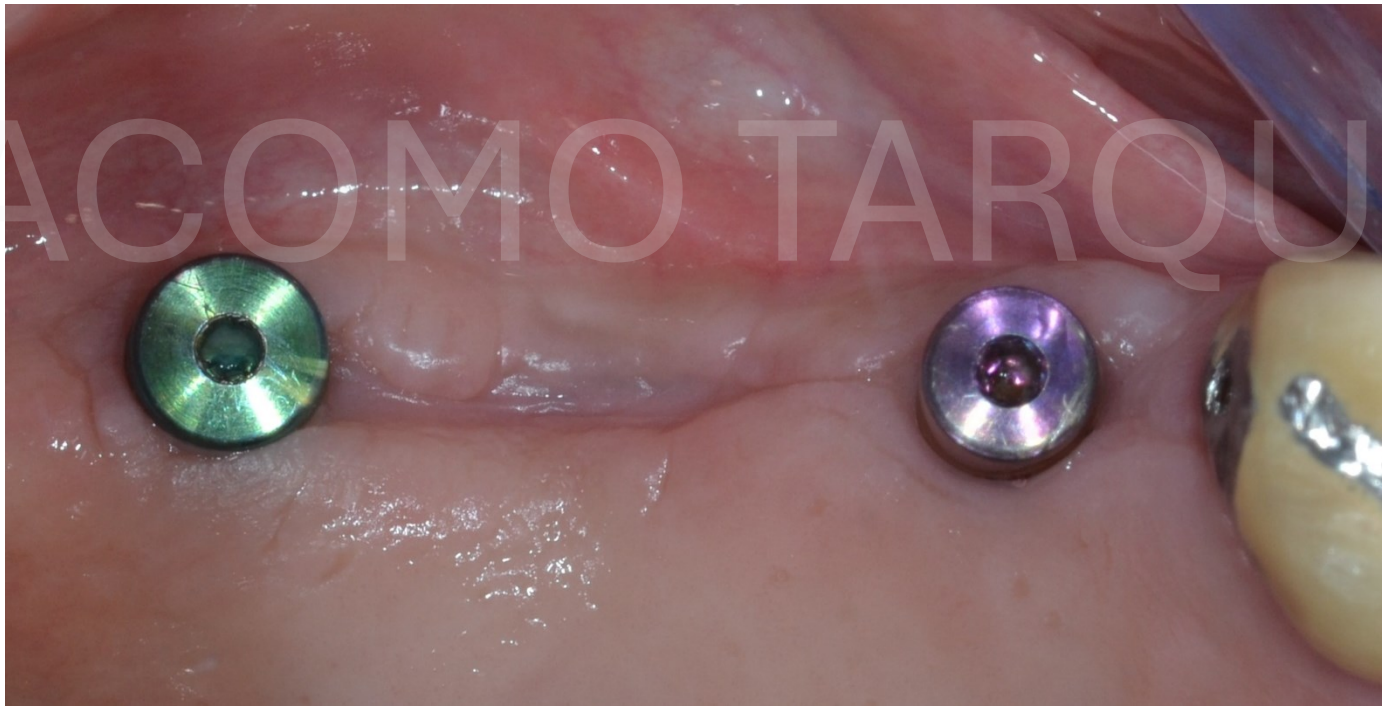
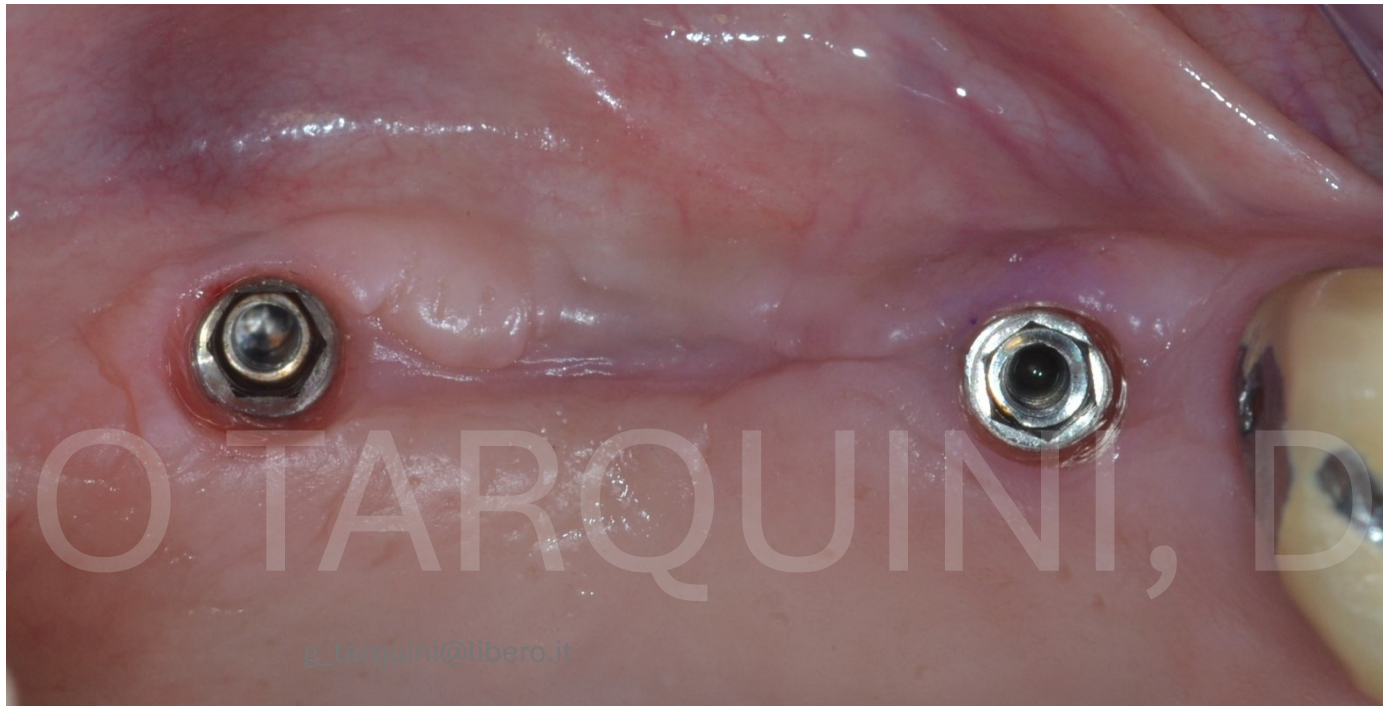




follow-up. The number of patients that achieved complete root coverage was also assessed. According to the investigated parameters, ECM and CTG provide similar results when used in association with a CAF technique. Int J Periodontics Restorative Dent 2017;37:e217–e223. doi: 10.11607/prd.3144

Tarquini G.Coronally advanced flap technique to treat class I and II gingival recession in combination with a connective tissue graft or an equine collagen matrix. A retrospective study. IJPRD 2017;37:e217–e223.





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5 YEARS FOLLOW-UP

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- **Conclusions:**
- "Dome-shaped" CBCT images that are suggestive of cystic or pseudocystic lesions may be found during the evaluation of patients for a sinus lifting procedure.
- In such cases, it is mandatory to formulate a correct differential diagnosis in order to plan an adequate surgical treatment.
- The correction of these pathologic conditions may be performed prior or contemporaneous to the sinus lifting procedure.
- A multi-disciplinary approach including ENT specialists and oral surgeons is recommended.

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