



Clinical and esthetic outcomes of immediate implants with or without a Volume Stable Collagen Matrix: preliminary results of a randomized clinical trial

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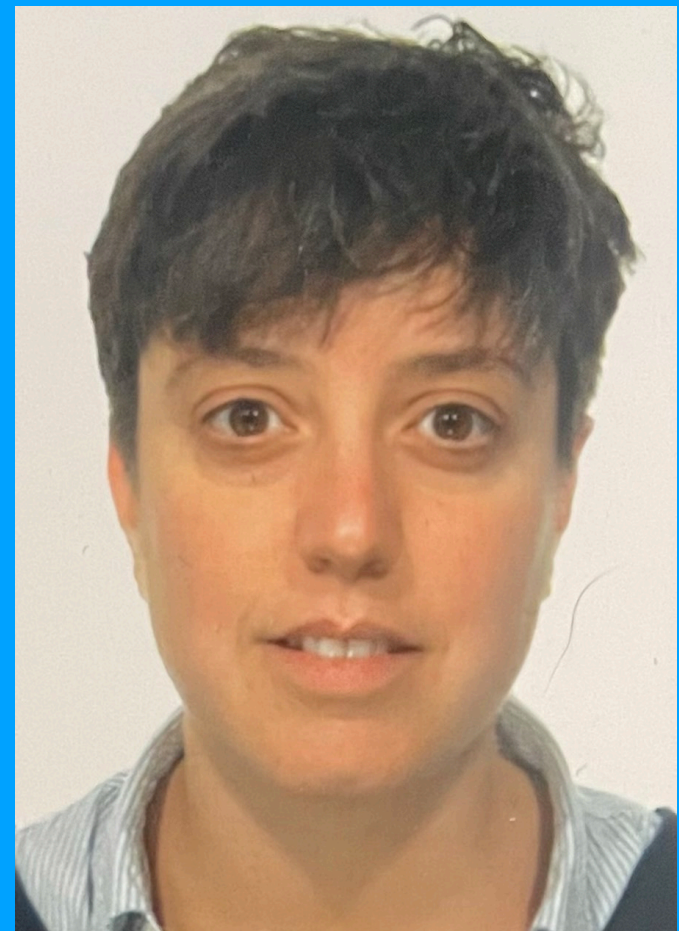




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Immediate implants

Reduce treatment time

Patients' surgical phases

Socket healing
/Osseointegration

Implant survival: IIP (94.9%);
DIP (98.9%)

Mid-facial mucosal recession

Papillary height loss
(interproximal bone loss)

Soft tissue grafts can increase gingival thickness, reduce the risks of soft tissue recession and obtain better esthetic outcomes.

Autogenous connective tissue graft (CTG) has been used for years to increase gingival thickness and to reduce the risks of soft tissue dehiscence.

Limitations and disadvantages of CTG are associated with autogenous soft tissue harvesting

therefore, Volume Stable Collagen Matrixes (VCMXs) has been introduced in order to reduce patients' morbidity.

Clinical and Aesthetic Outcome with Post-Extractive Implants with or without Soft Tissue Augmentation: A 2-Year Randomized Clinical Trial

Marco Migliorati, DDS;* Leonardo Amorfini, DDS;* Alessio Signori, MSc;* Armando Silvestrini Biavati, MD, DDS;* Stefano Benedicenti, DDS*

REVIEW ARTICLE

WILEY

Effects of soft tissue augmentation procedures on peri-implant health or disease: A systematic review and meta-analysis

Daniel S. Thoma¹ | Nadja Naenni¹ | Elena Figuero^{2,3} | Christoph H. F. Hammerle¹ | Frank Schwarz^{1,5} | Ronald E. Jung¹ | Ignacio Sanz-Sánchez^{2,3}

REVIEW

JOURNAL OF Periodontology

Peri-implant soft tissue phenotype modification and its impact on peri-implant health: A systematic review and network meta-analysis

Lorenzo Tavelli¹ | Shayan Barootchi¹ | Gustavo Avila-Ortiz² | Istvan A. Urban^{1,3} | William V. Giannobile^{1,4} | Hom-Lay Wang¹

RANDOMIZED CLINICAL TRIAL

WILEY

Effect of connective tissue grafting on peri-implant tissue in single immediate implant sites: A RCT

Elise G. Zuiderveld¹ | Henny J. A. Meijer^{1,2} | Laurens den Hartog¹ | Arjan Vissink¹ | Gerry M. Raghoebar¹

SUPPLEMENT ARTICLE

WILEY

The effectiveness of immediate implant placement for single tooth replacement compared to delayed implant placement: A systematic review and meta-analysis

Jan Cosyn^{1,2} | Liesa De Lat¹ | Lorenz Seyssens¹ | Ron Doornewaard¹ | Ellen Deschepper³ | Stijn Vervaeke¹

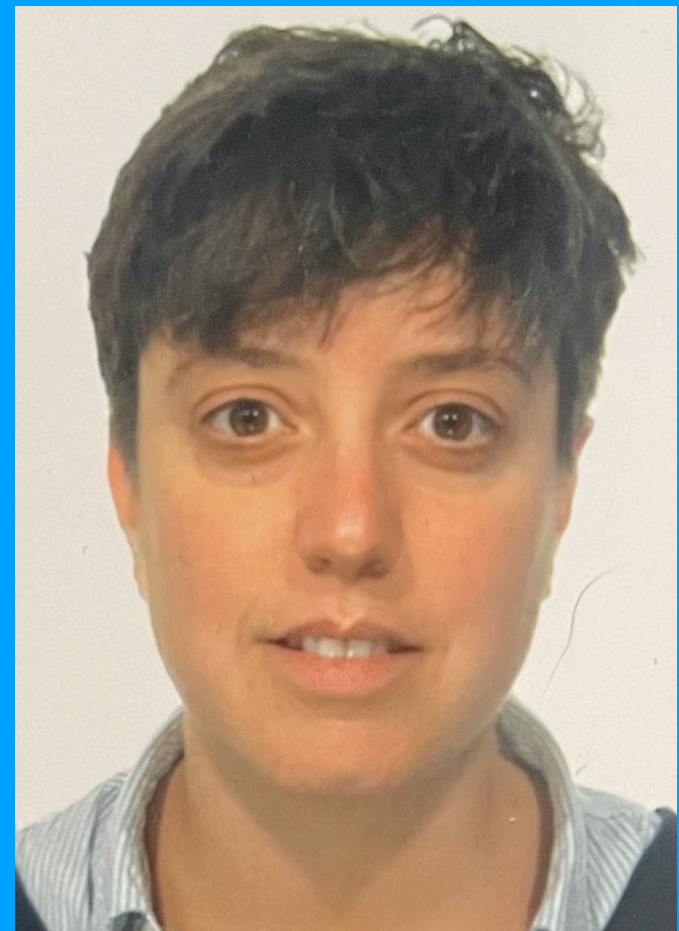


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Aim

to evaluate and compare the clinical and esthetic outcomes in patients that received type I immediate implants treated with (Test group) or without (Control group) a soft tissue augmentation performed with a volume-stable collagen matrix (VCMX).

Ethical committee approval number: 19228
Comitato etico area vasta nord ovest, University of Pisa, Italy

Clinicatrial-gov registration: NCT05081284

Randomization and allocation:
sealedenvelope.com

Sample size calculation: $p > 0.05$, a power of 80% and SD of 0.5 mm (Migliorati et al. 2015). 15 subjects/group

Inclusion criteria

- > 18 years old;
- a single failing tooth in the esthetic region
- adjacent teeth without any dental pathologies;

Exclusion criteria

- heavy smokers (more than 10 cigarettes/day);
- head and neck radiation treatment;
- full contraindication to implant surgery;
- uncontrolled periodontal disease;
- full mouth plaque and bleeding score >25%;
- extraction sockets Juodzbaly 2008
- allergy, sensitivity or intolerance to collagen
- pregnant or who are breastfeeding

Primary outcome

Soft Tissue Thickness (STT)

The primary aim was to compare soft tissue thickness at 3mm (STT3) and 6mm (STT6) from the mid-buccal gingival margin at T0 (before surgery) and at T1 (six months after surgery).



Secondary outcomes

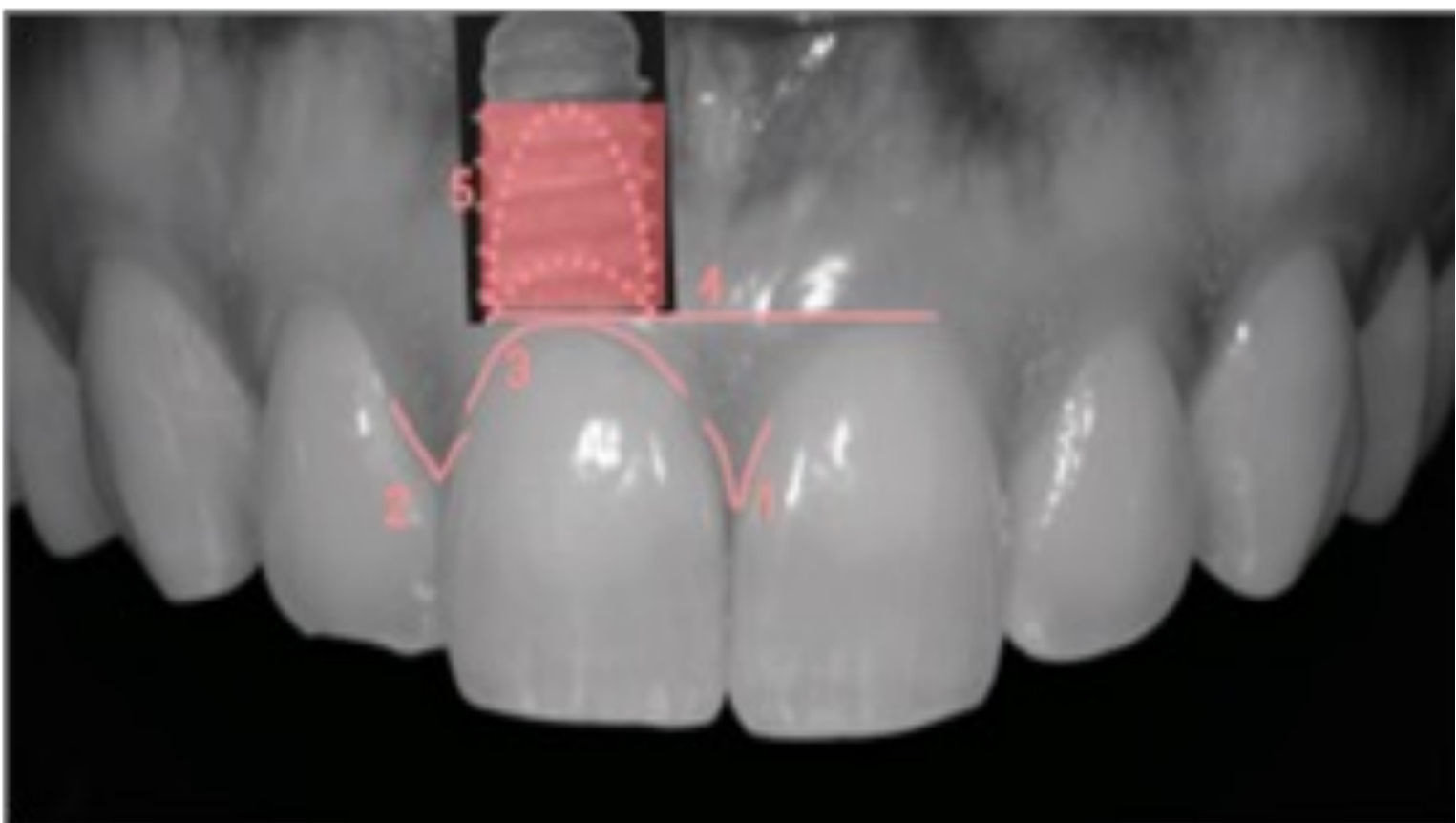
Pink Esthetic Score (PES)

Vertical soft tissue position (VSP)

Width of keratinized tissue (WKT)

Marginal bone loss (MBL)

Surgery time and patient satisfaction



PES (Pink esthetic score): Total Score =

o Mesial Papilla	0	1	2
o Distal Papilla	0	1	2
o Curvature of Facial Mucosae	0	1	2
o Level of Facial Mucosae	0	1	2
o Root Convexity / Soft Tissue	0	1	2
o Soft-tissue color	0	1	2
o Soft-tissue texture	0	1	2



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23 Patients received 23 implants

females 63,3%, males 36,7%

implants inserted in maxilla 68,9%, implants inserted in mandible 31,1%

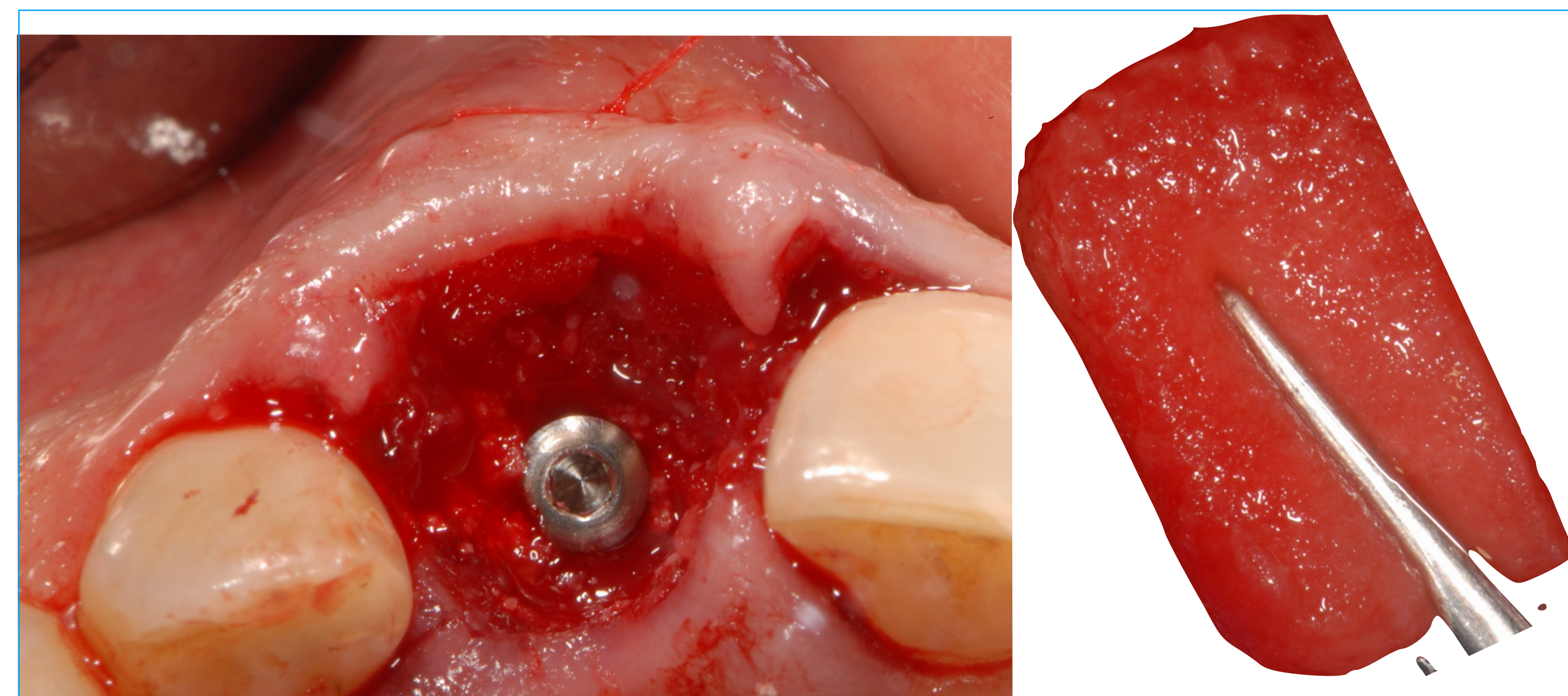
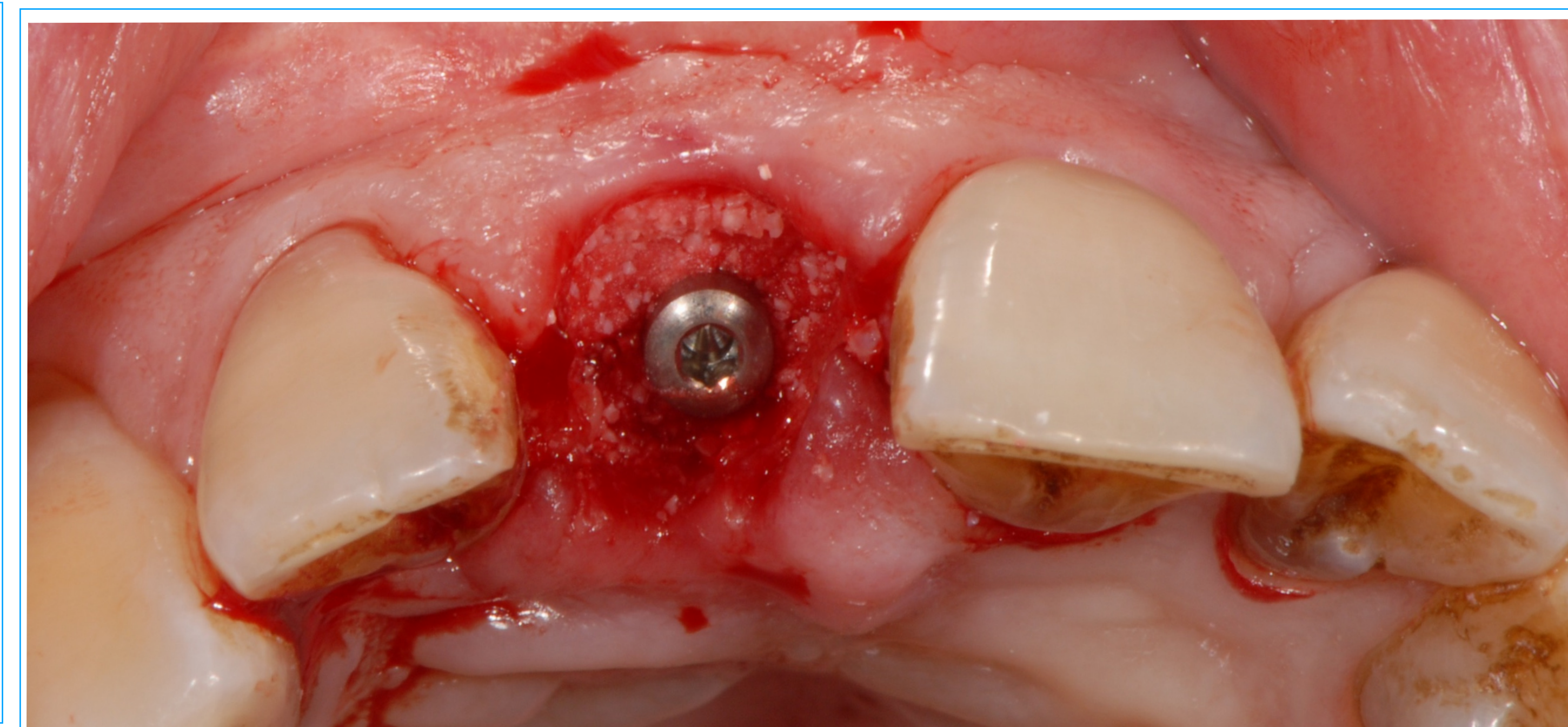
central incisors 27,9%, cuspid 5,5%, lat incisor 5,5%, 11 premolars 61,1%

Age: $48,7 \pm 13.7$

Medical History: diabetes 5,5%, smoking 11,1%, hypertension 11,1%

12 Test Group

11 Control Group





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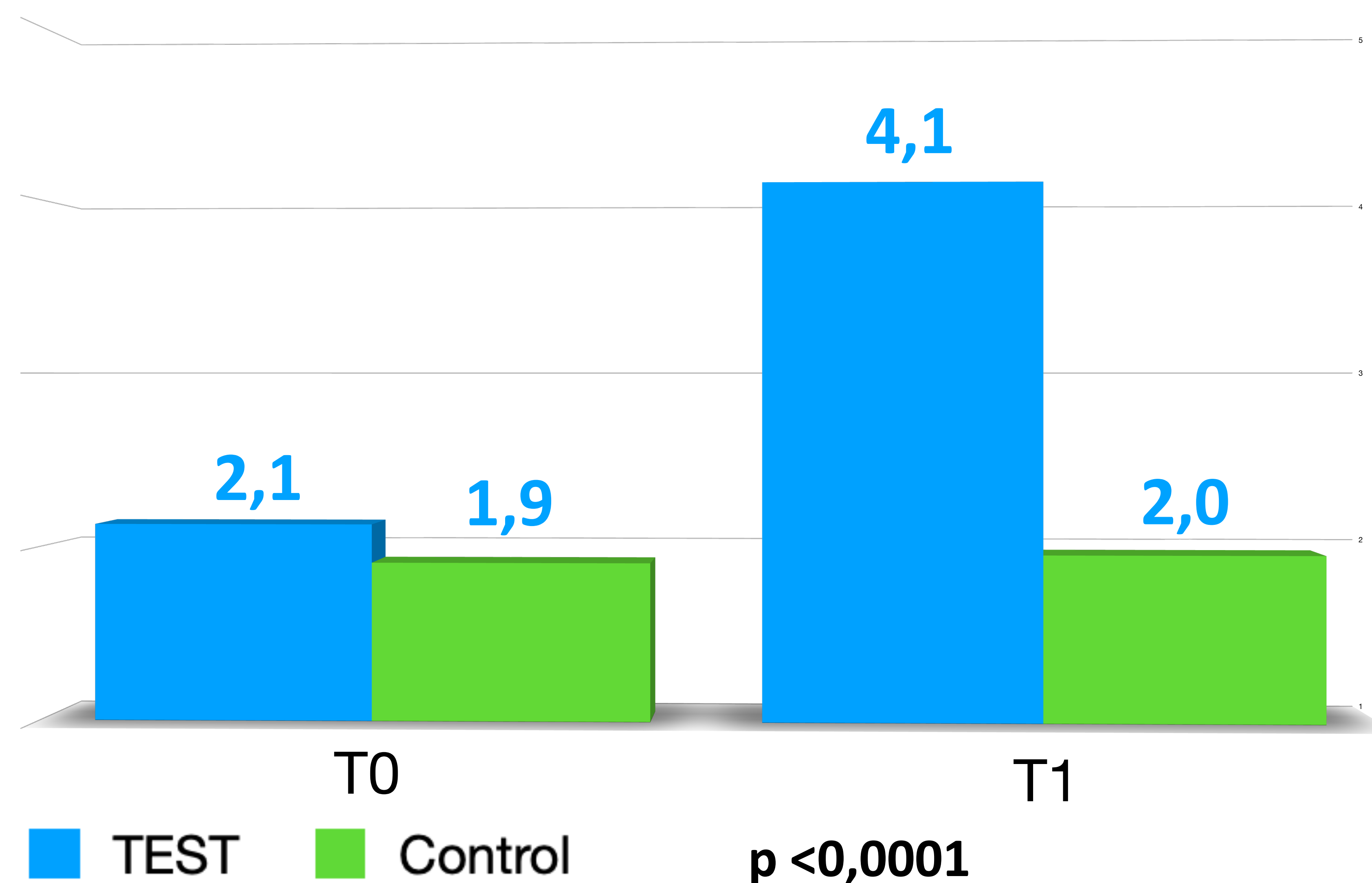
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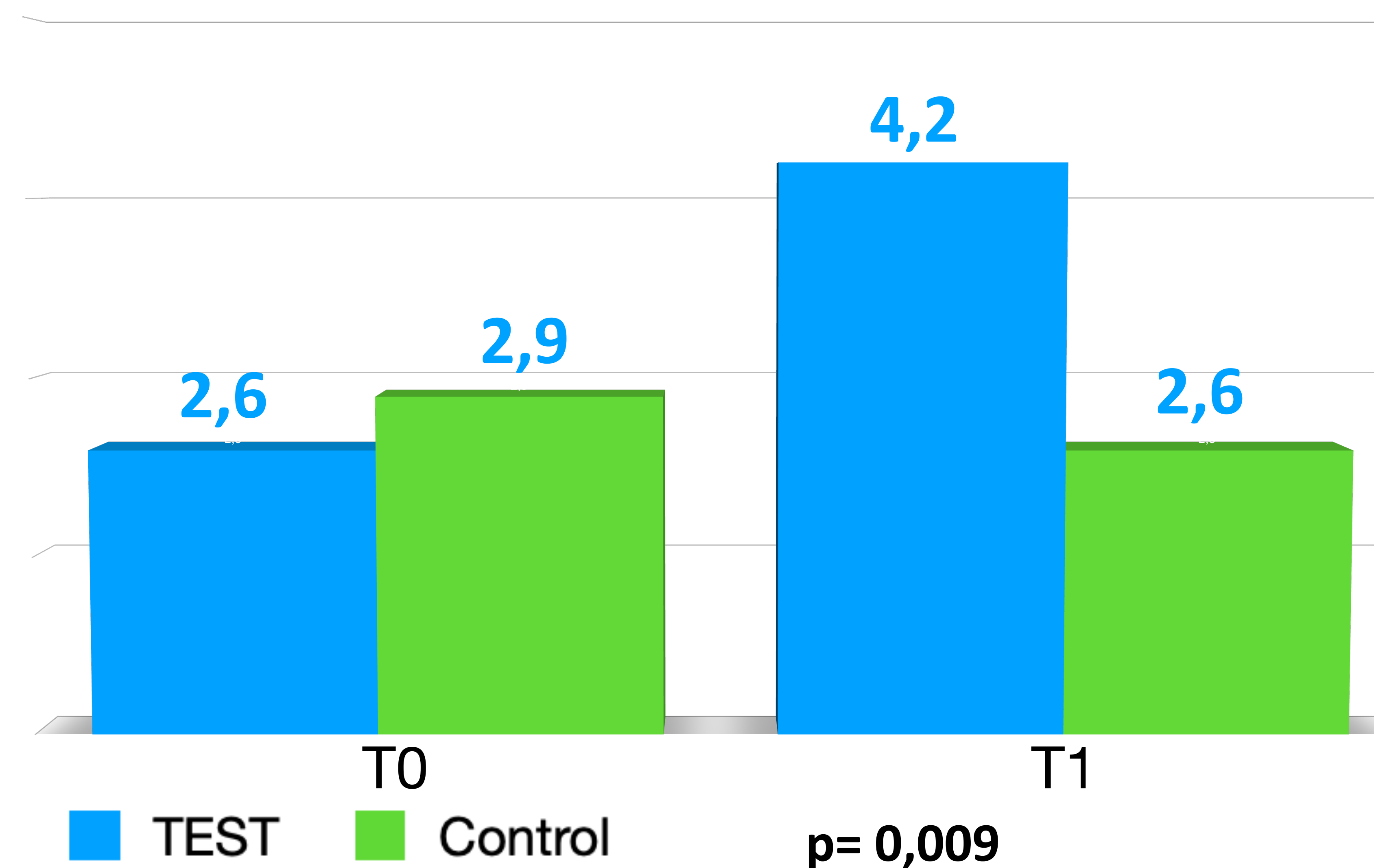
6 months after surgery

STT 3mm



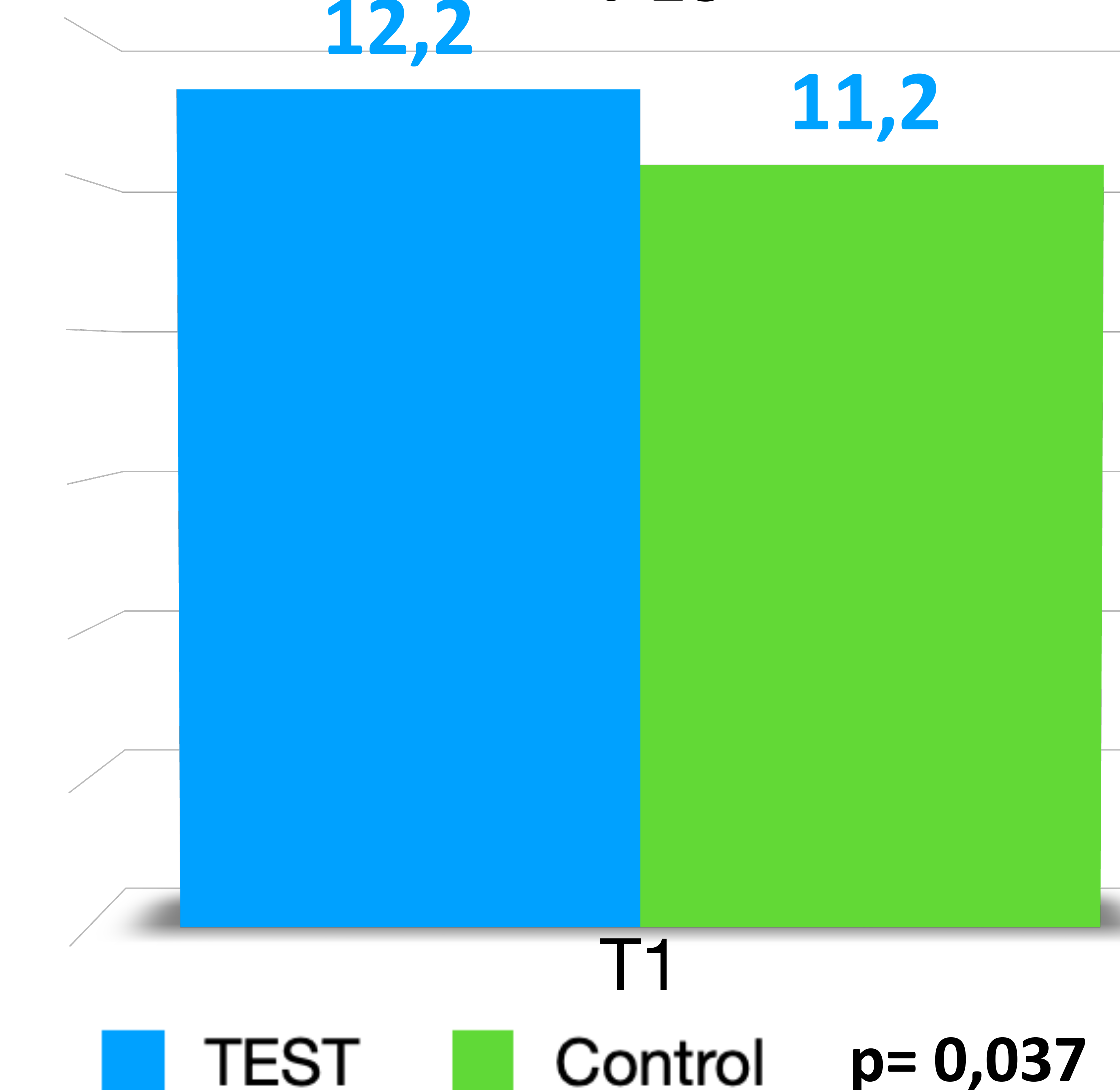
Primary outcome

STT 6mm



Secondary outcomes

PES



Conclusions

Surgical time length and patient's satisfaction= no difference between groups

Width of keratinized tissue (WKT)= no difference between groups

Vertical soft tissue position (VSP)= no difference between groups

Marginal bone loss (MBL)= no difference between groups

According to our preliminary data, the use of a VCMX simultaneously with immediate implant placement can significantly improve the STT and the PES as compared to implants placed without a VCMX.

However, the esthetic and functional results were satisfactory for both the experimental groups.