

STRAUMANN® iEXCEL
CLINICAL CASEBOOK



STRAUMANN® iEXCEL

EMPOWERING YOU TO EXCEL



✱ TRUE CLINICAL VERSATILITY

With four implant designs (Straumann BLC, BLX, TLC and TLX) in one single instrument set, you're able to choose the right option to tackle most patient situations, even during surgery. The SLActive® surface excels even for patients who are compromised by smoking, diabetes, or radiation therapy.¹⁻³

✱ SIMPLICITY YOU'LL LOVE

One TorcFit™ connection for all four implant designs sharing the same connection diameter for all prosthetics. Profit from restorative simplicity with a complete range of Straumann® original stock and customized prosthetics.

✱ CONNECTED DENTISTRY TO EMPOWER EXCELLENCE

Our system offers integrated digital workflows and services designed to deliver predictable, efficient and high-quality outcomes, from single to full-arch indications.



REFERENCES

1 Alsahhaf A et al. Survival of Titanium-Zirconium and Titanium Dental Implants in Cigarette-smokers and Never-smokers: A 5-Year Follow-up. Chin J Dent Res. 2019;22(4):265-272

2 Cabrera-Domínguez JJ, Castellanos-Cosano L, Torres-Lagares D, Pérez-Fierro M, Machuca-Portillo G. Clinical performance of titanium-zirconium implants with a hydrophilic surface in patients with controlled type 2 diabetes mellitus: 2-year results from a prospective case-control clinical study. Clin Oral Investig. 2020 Jul;24(7):2477-2486

3 Nelson, K., Stricker, A., Raguse, J.-D. and Nahles, S. (2016), Rehabilitation of irradiated patients with chemically modified and conventional SLA implants: a clinical clarification. J Oral Rehabil, 43: 871 -872

A COMPREHENSIVE RANGE OF **CLINICAL** CASE REPORTS.



In this casebook we present a range of clinical case reports that address various aspects of implantology. Our authors, experienced implantologists and dentists, have used their extensive expertise to present an exciting and educational selection of case reports.

Straumann iXCEL performance system with other solutions is presented in detail to give you a comprehensive insight into the various options.

The cases presented cover a variety of clinical scenarios, ranging from single tooth replacements to full-arch treatments.

We hope that this casebook will provide you with new insights and inspiration.

CONTENTS

► **SINGLE-UNIT CASES**

ANTERIOR

POSTERIOR

► **MULTIPLE-UNIT CASES**

ANTERIOR

POSTERIOR

► **FULL-ARCH-UNIT CASES**

STRAUMANN® iEXCEL

CASES SINGLE-UNIT ANTERIOR ZONE

iEXCEL 

STRAUMANN®
PERFORMANCE
SYSTEM

CASES SINGLE-UNIT ANTERIOR ZONE



- Computer guided placement of Straumann® BLC implant with soft tissue augmentation in the esthetic area
▶ Paolo Casentini, Italy
- Immediate implant placement and function in the esthetic zone with Straumann® BLX implant
▶ Luiz Otavio Camargo, Brazil

COMPUTER GUIDED PLACEMENT OF STRAUMANN BLC IMPLANT WITH SOFT TISSUE AUGMENTATION IN THE ESTHETIC AREA

A CLINICAL CASE REPORT BY PAOLO CASENTINI, ITALY

COMPUTER GUIDED PLACEMENT OF STRAUMANN BLC IMPLANT WITH SOFT TISSUE AUGMENTATION IN THE ESTHETIC AREA

A CLINICAL CASE REPORT BY PAOLO CASENTINI, ITALY



EXPERT



Paolo Casentini

Italy

DETAILS

- Graduated in Dentistry at the University of Milan-Italy.
- Senior Fellow of the ITI and the Past Chairman of the Italian section of ITI, Active Member of the Italian Academy of Osseointegration (IAO).
- Author or co-author of scientific papers about Implantology and Regenerative Surgery published on peer-reviewed international journals.
- Co-author 12 text-books about Implantology, Pre-Implant Surgery and Oral Surgery some of them published in English and/or translated in several other languages, including 7 volumes of ITI Treatment Guide.
- His main fields of interest are the surgical and prosthetic aspects of Implantology, Periodontology and Prosthetic Rehabilitation in Advanced and Esthetically demanding cases. He has extensively lectured on these topics in more than 50 Countries.

COMPUTER GUIDED PLACEMENT OF STRAUMANN BLC IMPLANT WITH SOFT TISSUE AUGMENTATION IN THE ESTHETIC AREA

A CLINICAL CASE REPORT BY PAOLO CASENTINI, ITALY



DETAILS

Patient Information

Gender	F
Age	36
Jaw	Maxilla
Health status	Healthy
Bone type	Type II
Local infection	No
Anatomical defects	Yes
Risk factors	None

Initial Situation



Intraoral initial situation



Pre Operative X-ray

Treatment Planning

- The patient's age, medical conditions, and expectations are evaluated.
- Digital planning to establish an implant prosthetically-driven position.
- Guided surgery, placement of apically tapered implant Straumann® BLC® Ø 3.3mm 12mm SLActive® Roxolid®.
- Primary stability more than 30 Ncm.
- Provisional Maryland Bridge.
- Conventional loading protocol.

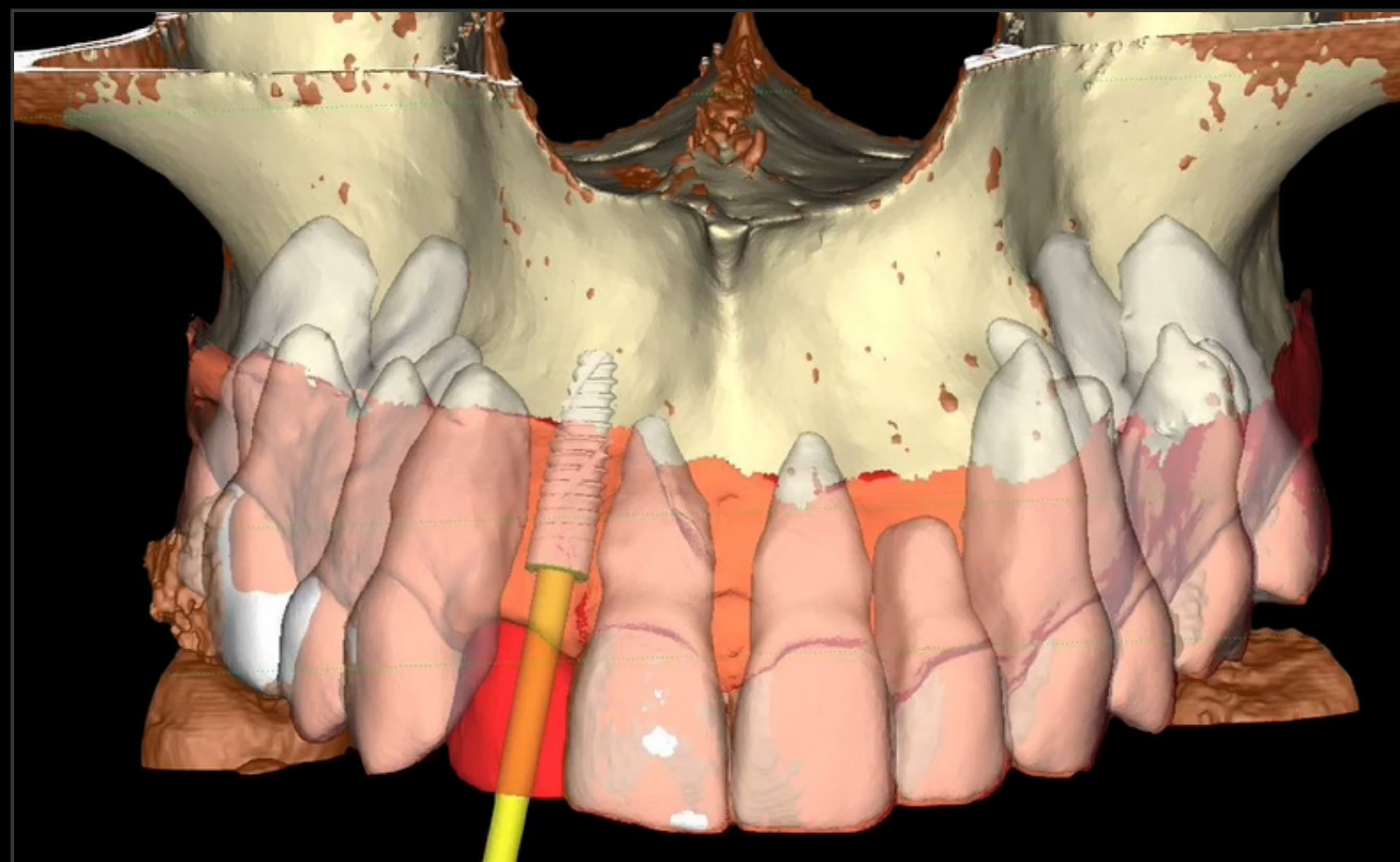
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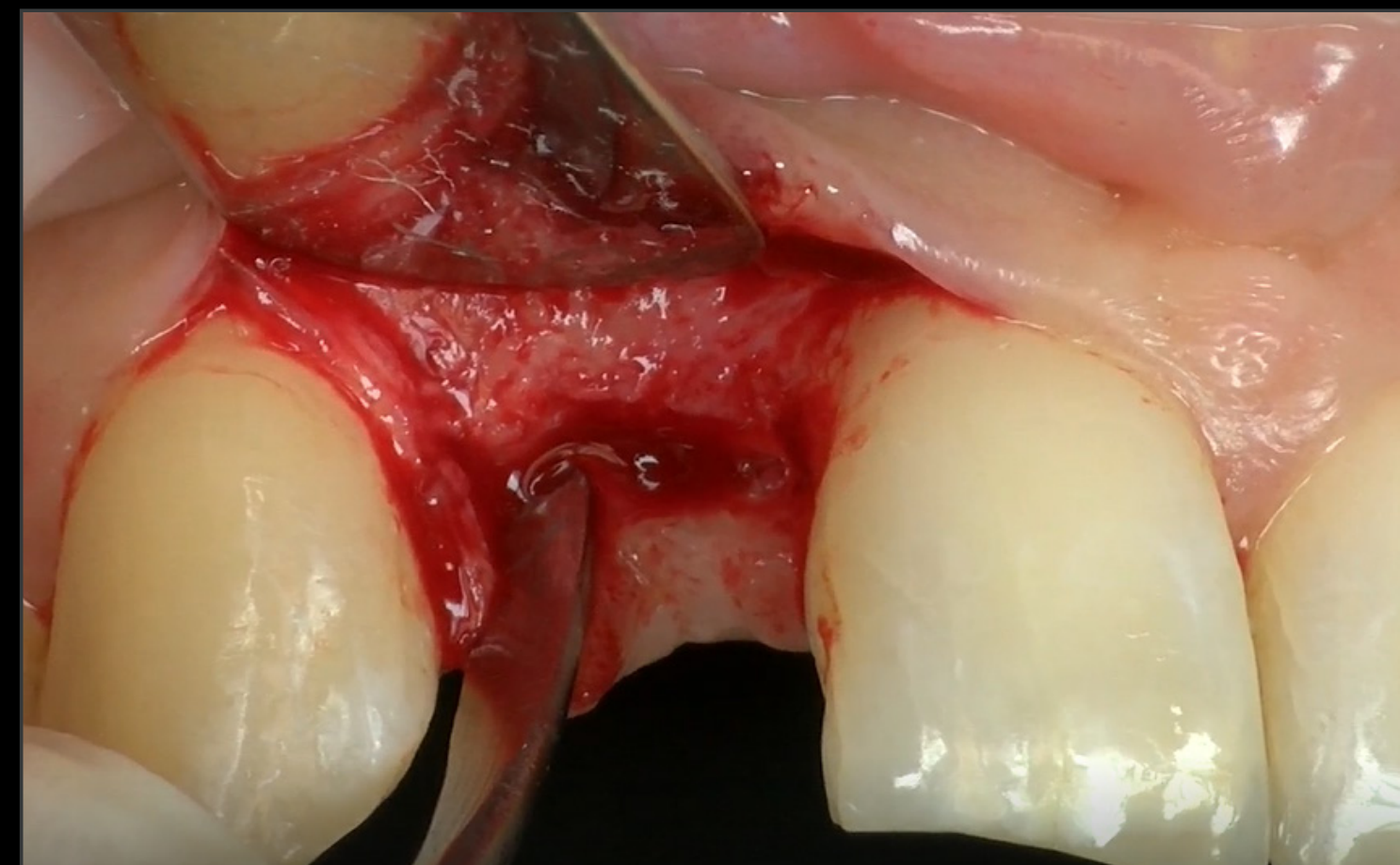


DETAILS

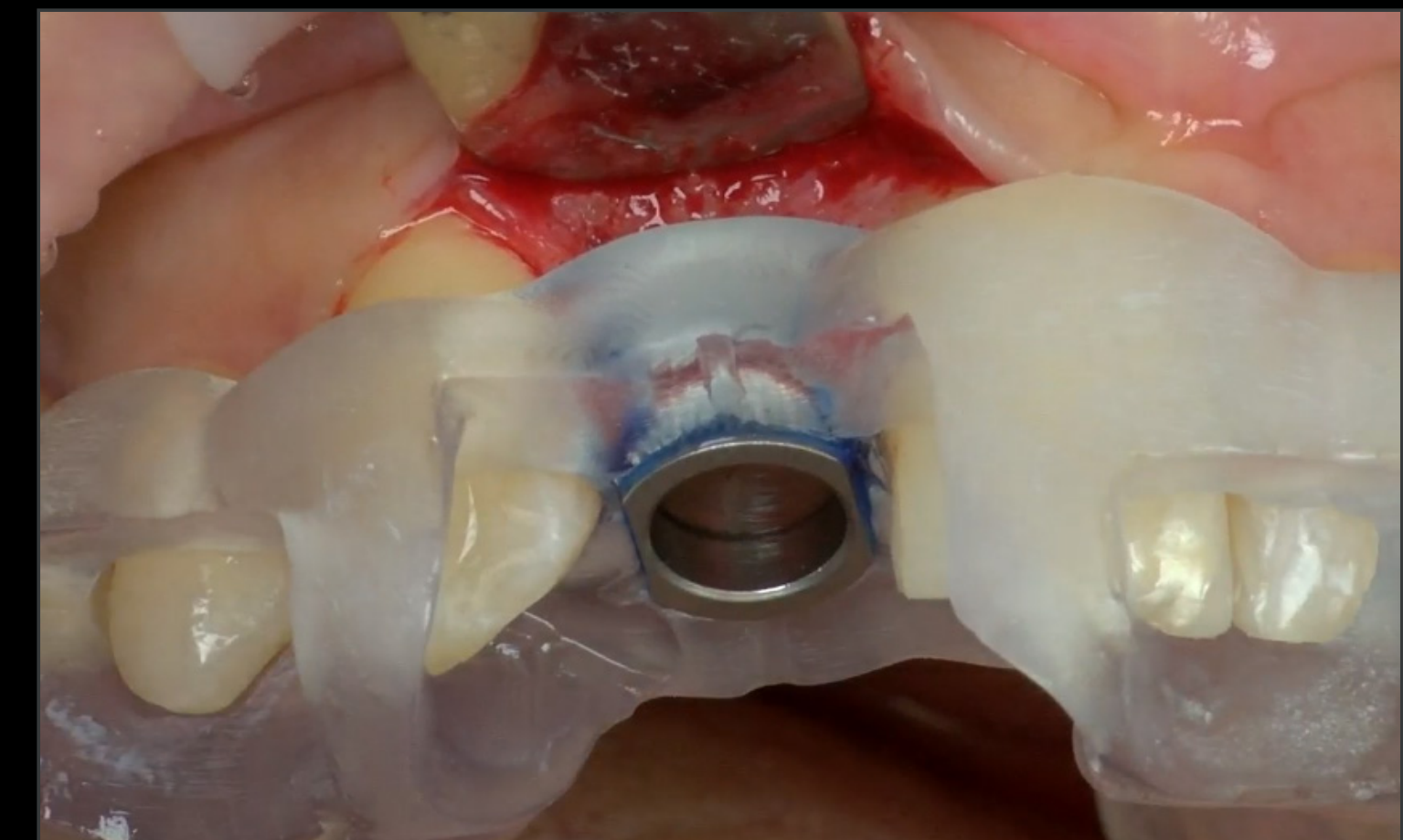
Surgical & Prosthetic Procedures



Digital planning with coDiagnostiX®



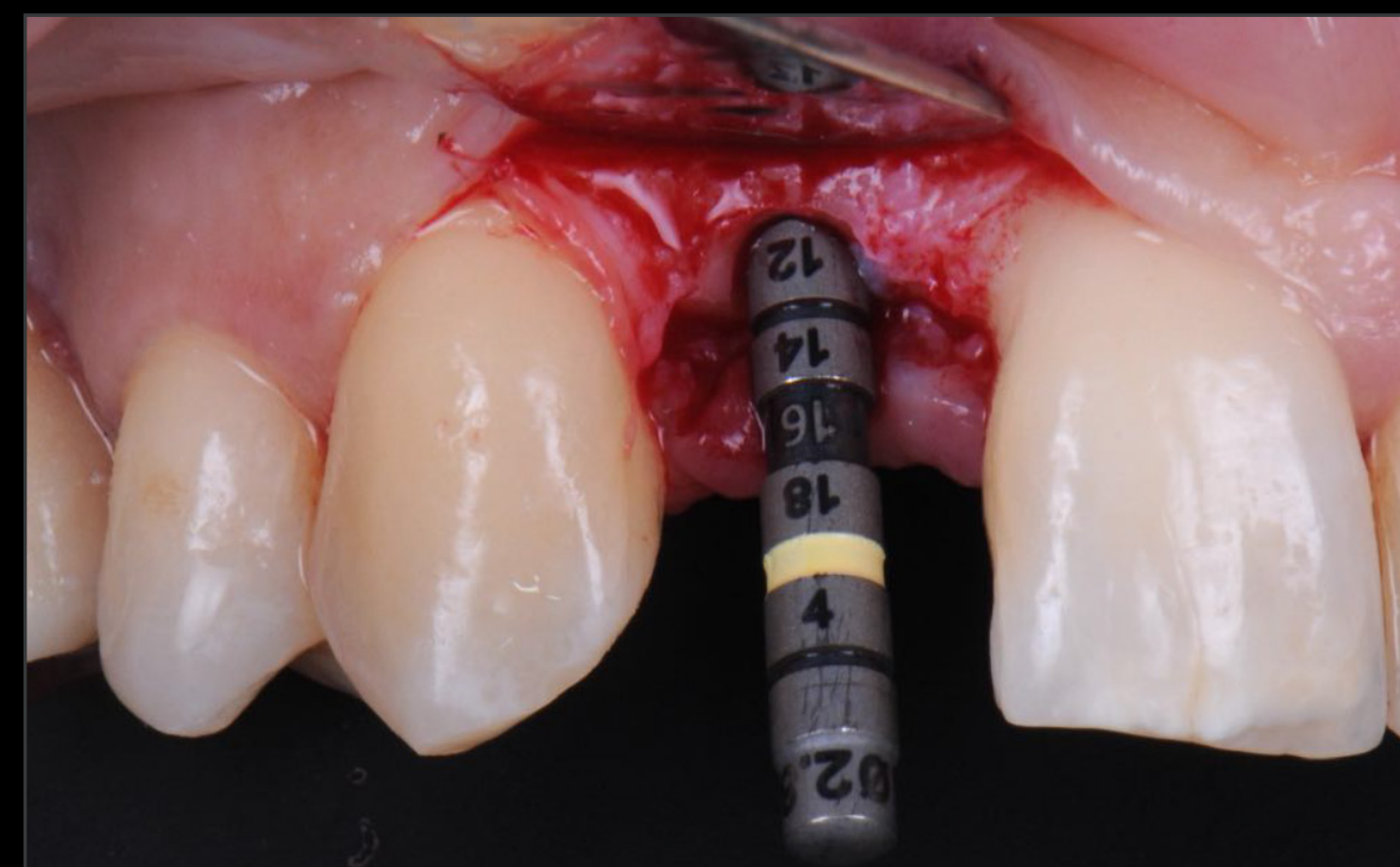
Flap opening



Surgical Guide in place with verification windows



Implant-site preparation



Verification of drill depth and direction

COMPUTER GUIDED PLACEMENT OF STRAUMANN BLC IMPLANT WITH SOFT TISSUE AUGMENTATION IN THE ESTHETIC AREA

A CLINICAL CASE REPORT BY PAOLO CASENTINI, ITALY

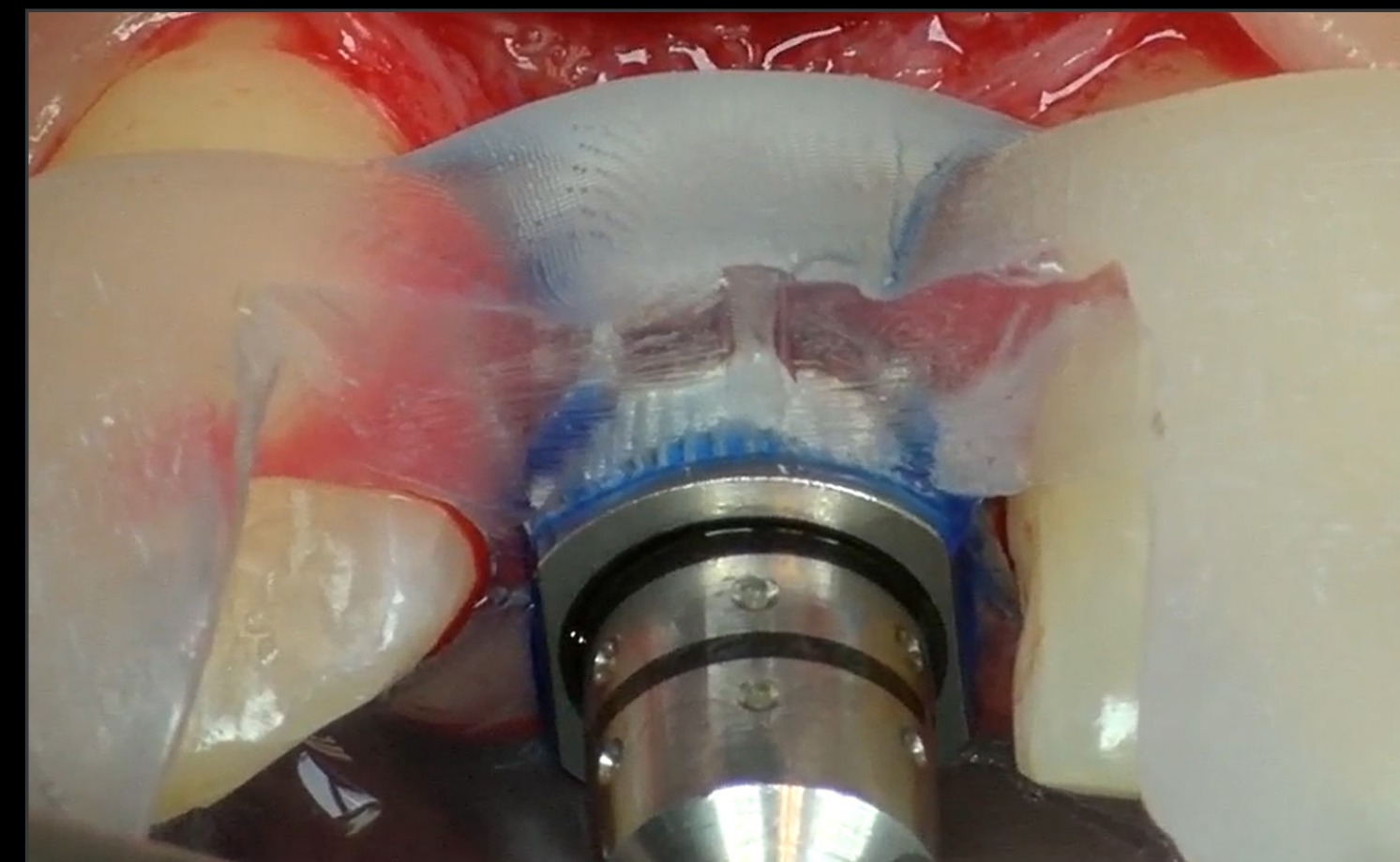


DETAILS

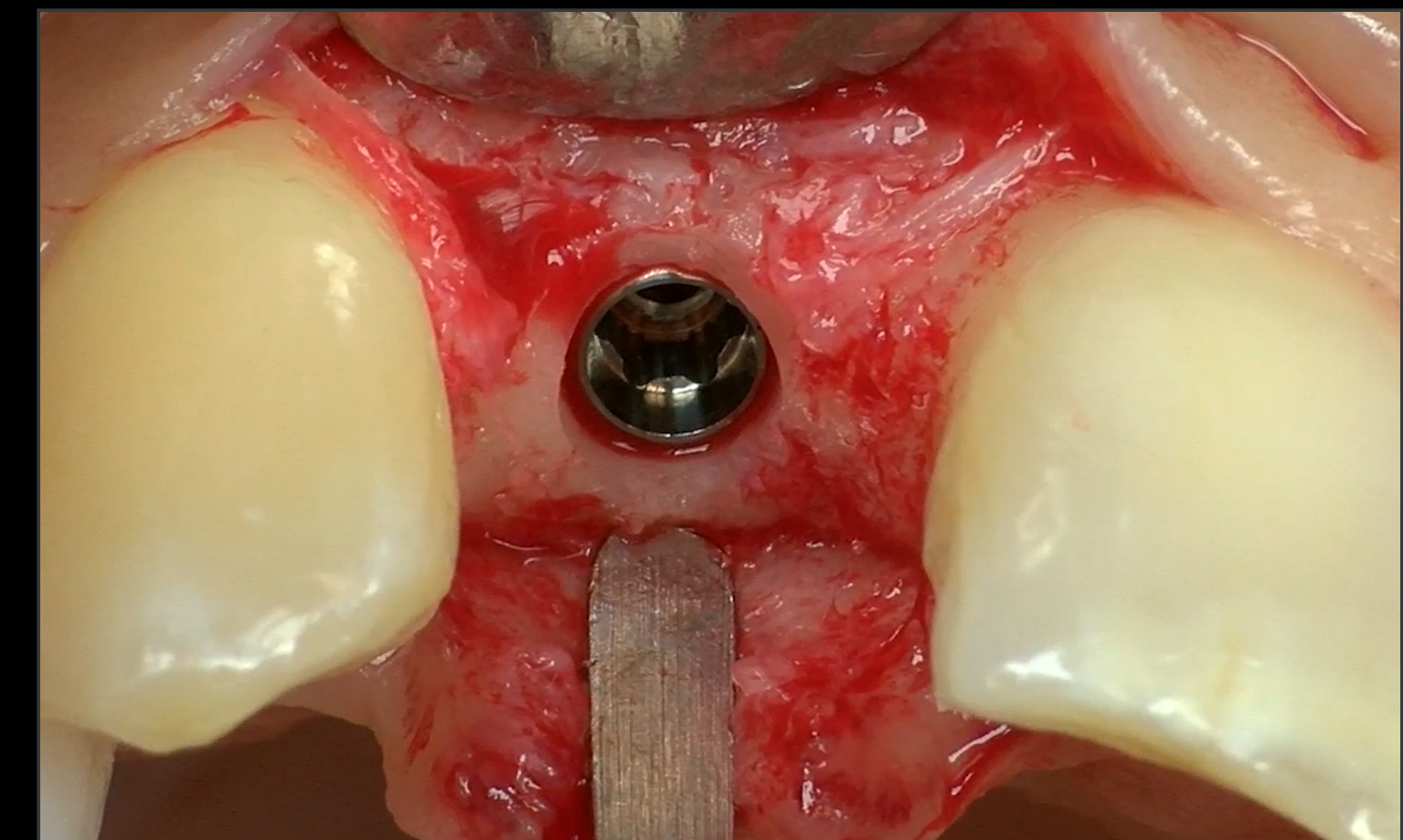
Surgical & Prosthetic Procedures



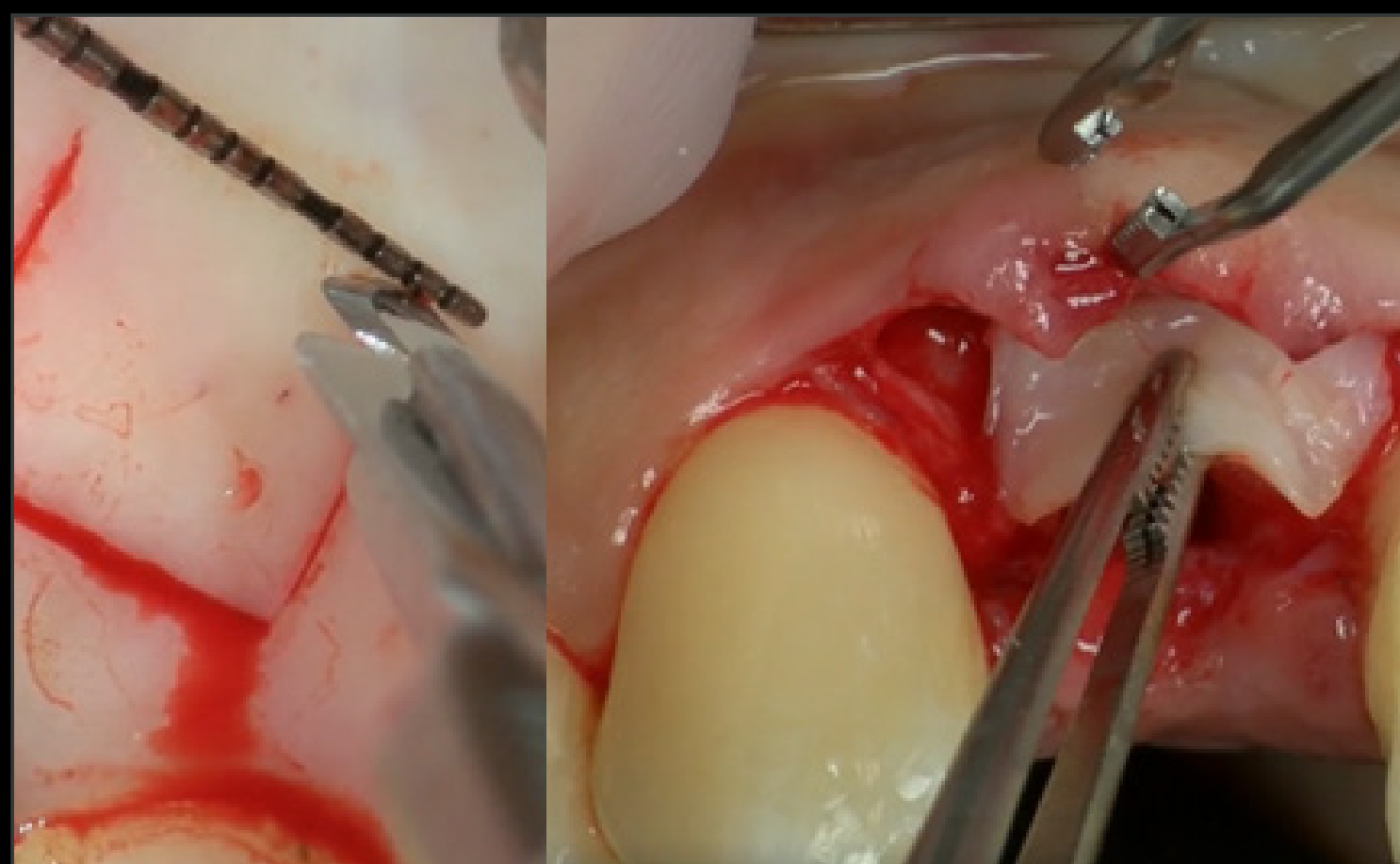
Straumann® BLC Ø 3.3 x 12 mm, SLActive®, Roxolid®



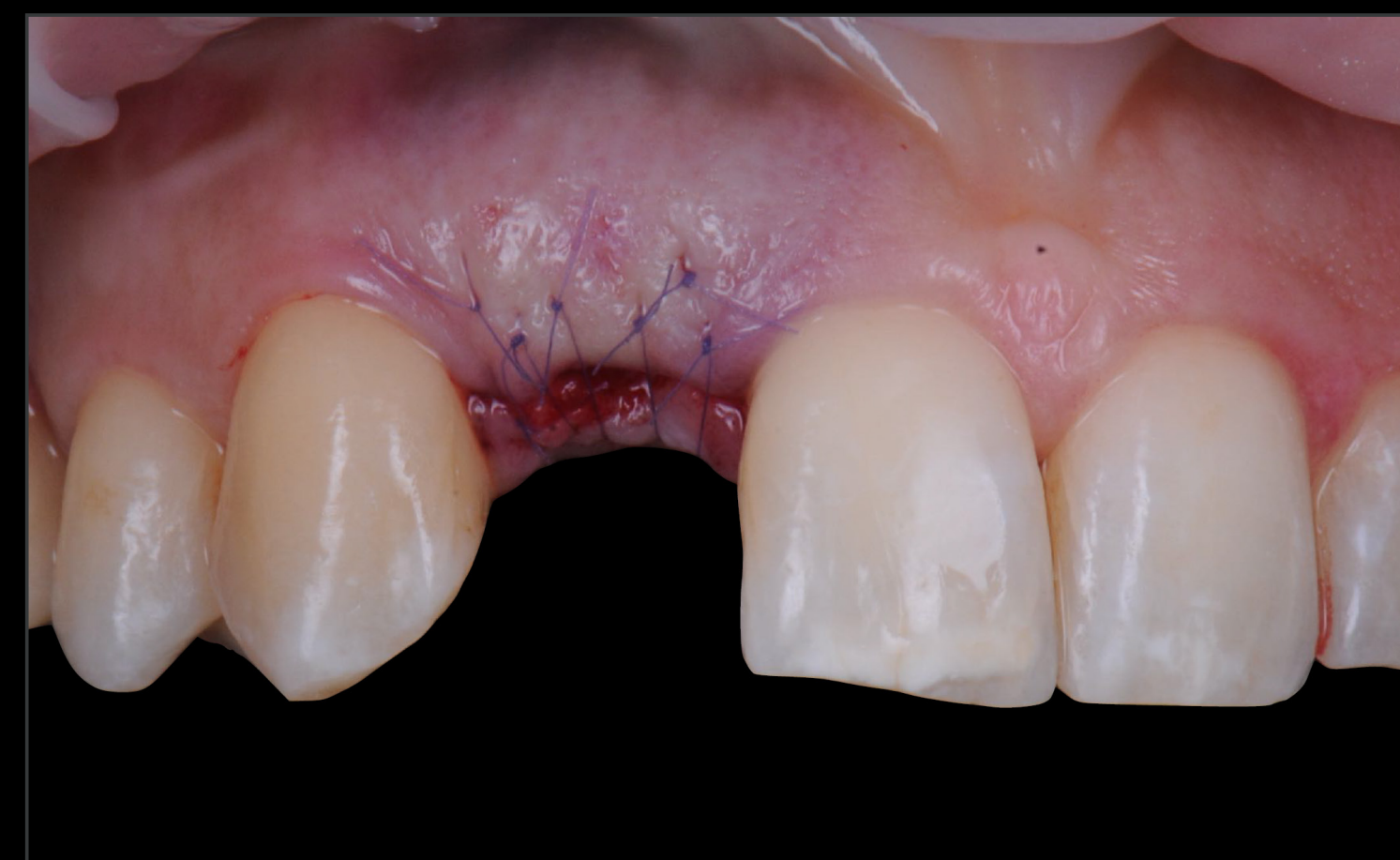
Final implant depth and TorcFit position



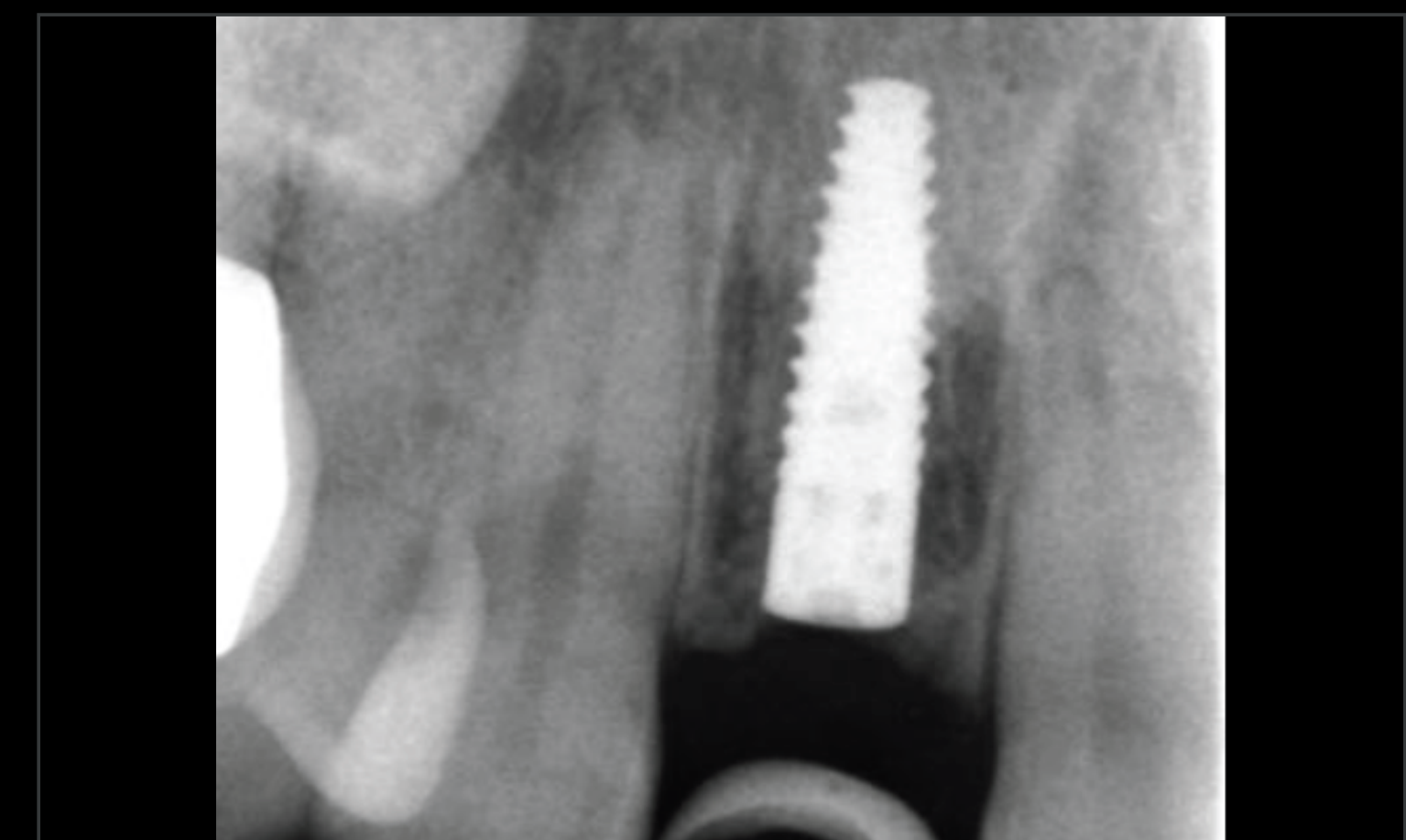
Occlusal view of the implant



Soft tissue graft



Final soft tissue closure



Radiographic control after surgical procedure

COMPUTER GUIDED PLACEMENT OF STRAUMANN BLC IMPLANT WITH SOFT TISSUE AUGMENTATION IN THE ESTHETIC AREA

A CLINICAL CASE REPORT BY PAOLO CASENTINI, ITALY

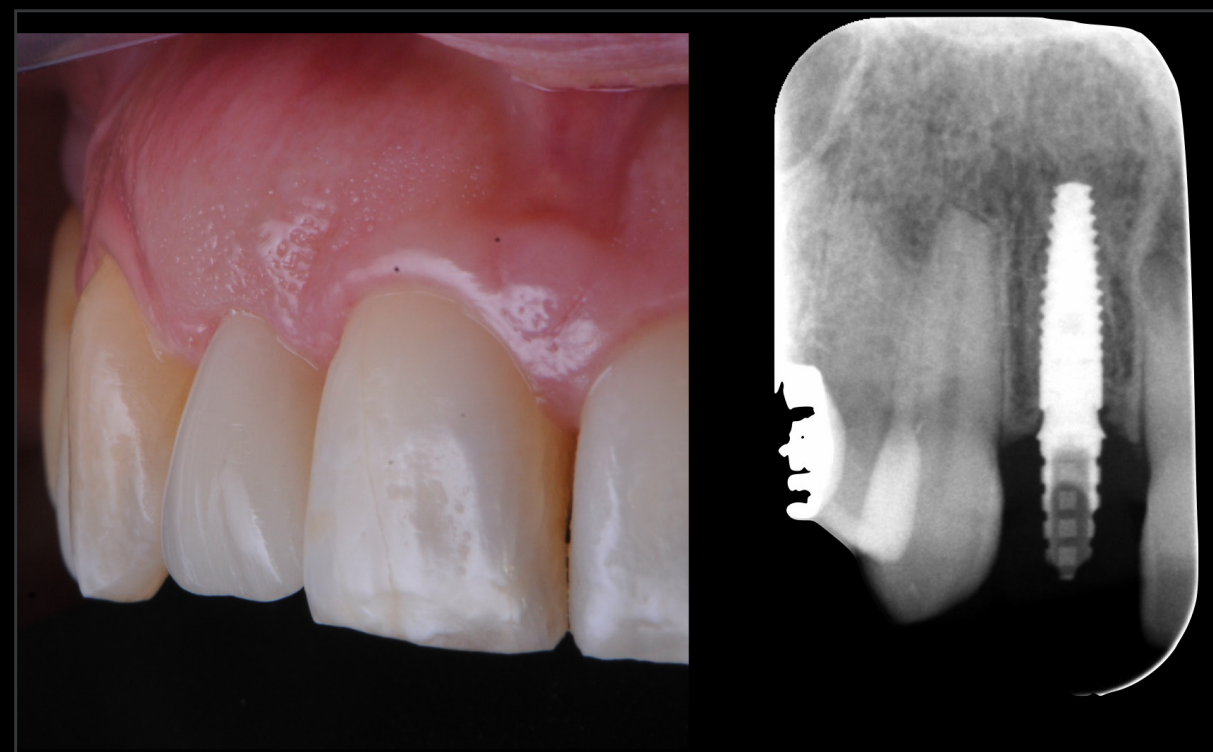


DETAILS

Treatment Outcome



Provisional Maryland Bridge in position



Screw retained provisional restoration after 8 weeks

Paolo Casentini

"I like the BLC implant design that combines the benefit of a tapered implant, a self-tapping shape, and a stronger prosthetic connection"

Before



After 8 weeks



IMMEDIATE IMPLANT PLACEMENT AND FUNCTION IN THE ESTHETIC ZONE WITH STRAUMANN® BLX IMPLANT

A CLINICAL CASE REPORT BY LUIZ OTAVIO CAMARGO, BRAZIL

IMMEDIATE IMPLANT PLACEMENT AND FUNCTION IN THE ESTHETIC ZONE WITH STRAUMANN® BLX IMPLANT

A CLINICAL CASE REPORT BY LUIZ OTAVIO CAMARGO, BRAZIL



EXPERT



Luiz Otavio Camargo
Brazil

DETAILS

- Masters and PhD in prosthodontics from the University of São Paulo, Brazil
- Director of the ImplanTeam project, São Paulo, Brazil
- Private practice in Sao Paulo specialized in oral rehabilitation and implantology
- ITI Fellow and speaker

Feedback from the Clinician

“Reaching and maintaining optimal gingival esthetics around implants in the anterior region is a challenging task. One of the main characteristics of immediate implant placement and provisionalization is its effectiveness in the esthetic outcome, preserving the existing bone and gingival architecture. Adequate primary stability is a prerequisite to enable this type of treatment. The implant design plays an important role in this context. In my clinical experience, the Straumann® BLX implant offers the ideal properties for these clinical situations. At the same time, the SLActive® surface has an impact on the early osseointegration of immediately restored implants.”

IMMEDIATE IMPLANT PLACEMENT AND FUNCTION IN THE ESTHETIC ZONE WITH STRAUMANN® BLX IMPLANT

A CLINICAL CASE REPORT BY LUIZ OTAVIO CAMARGO, BRAZIL



DETAILS

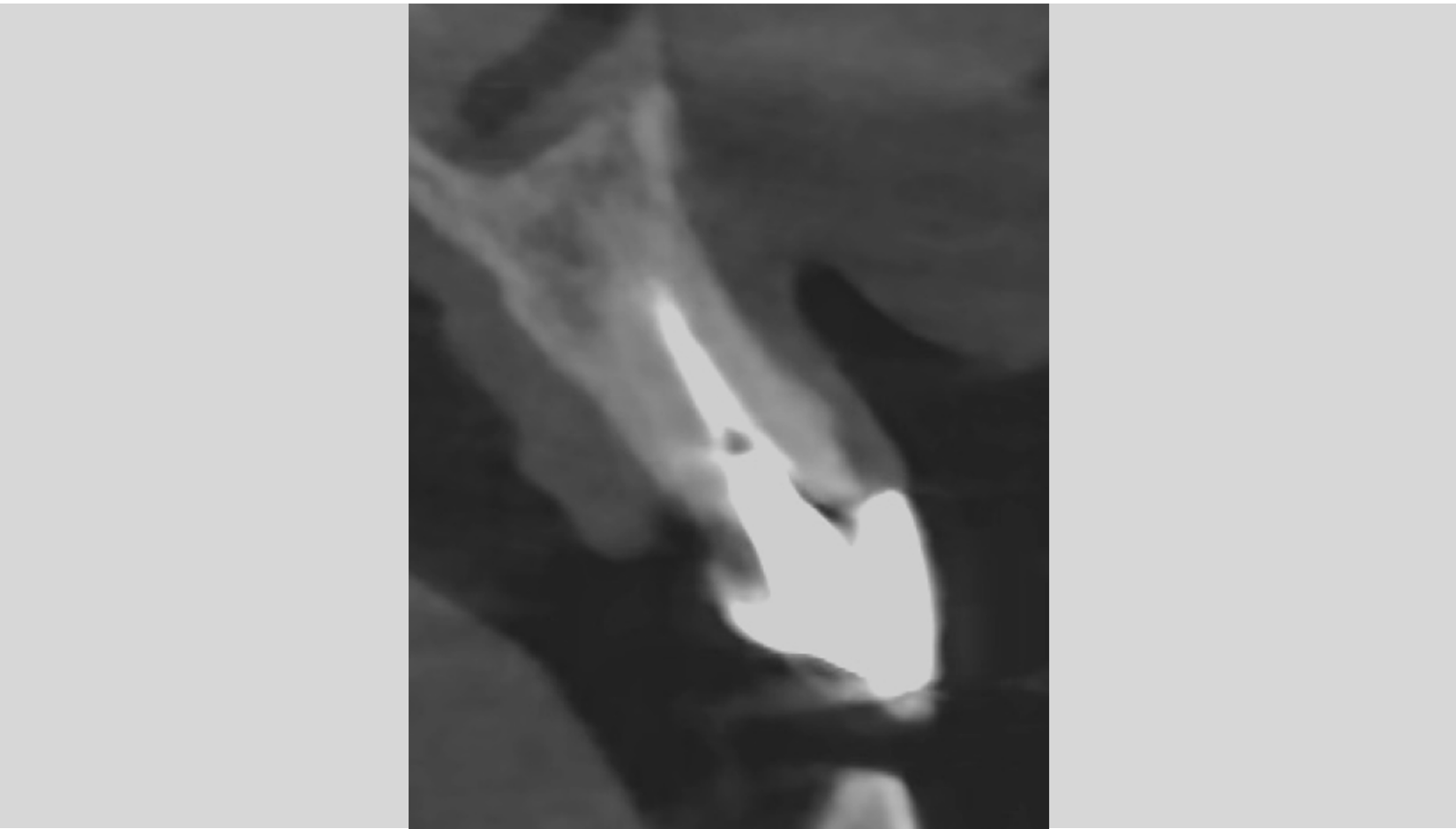
Patient’s Chief Complaint

“I have fractured a front tooth that already had a crown, and I would like to have a quick and esthetic result.”

Patient Information

Age	25
Jaw	Maxilla
Health status	Good
Smile line	Medium
Bone type	Type 2
Local infection	No
Anatomical defects	No
Risk factors	Buccal Plate ~1 mm

Initial Situation



CBCT shows adequate remaining apical bone and thin buccal plate.



Frontal view of tooth #11 after crown removal.

Treatment Planning

- Multifunctional guide preparation (surgical guide and future provisional restoration)
- Extraction of hopeless tooth #11
- Immediate Straumann® BLX Roxolid®, SLActive® 3.75 × 12 mm implant insertion without flap elevation
- Gap filling with Cerabone® and Mucoderm® placement on the buccal zone
- Immediate temporary abutment and chairside tooth shell pick-up
- Digital crown planning with Straumann® CARES Visual
- Final screw-retained crown delivery

IMMEDIATE IMPLANT PLACEMENT AND FUNCTION IN THE ESTHETIC ZONE WITH STRAUMANN® BLX IMPLANT

A CLINICAL CASE REPORT BY LUIZ OTAVIO CAMARGO, BRAZIL



DETAILS

Surgical & Prosthetic Procedures



Flapless osteotomy with a pilot drill using the multifunctional guide.



Straumann® BLX implant insertion on prosthetically-driven position.



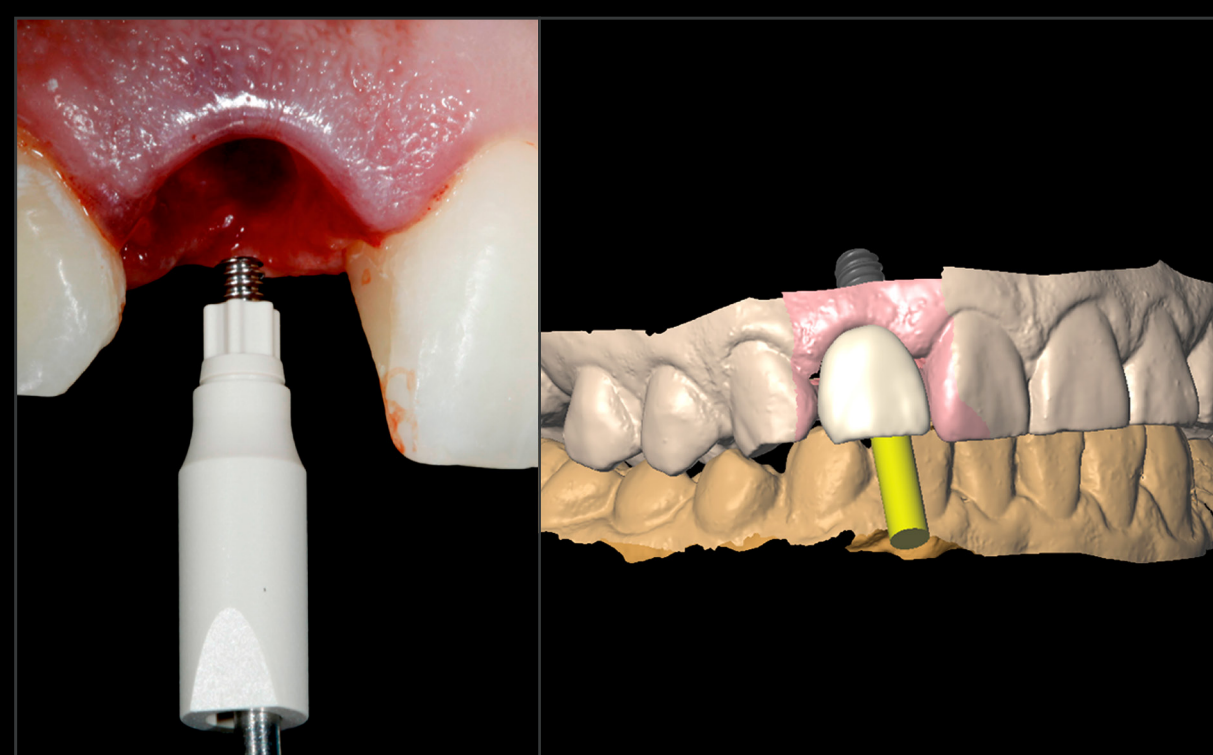
Mucoderm® positioning on the buccal zone.



Bone grafting with Cerabone®.



Delivery of temporary crown. A slim concave emergence profile concept was applied to the subgingival portion.



Intraoral scanning with Straumann® Virtuo Vivo™. Digital crown planning with Straumann® CARES Visual.



Chairside milling lithium disilicate block.



Final customized lithium disilicate restoration cemented extraorally to an RB/WB Variobase®.

IMMEDIATE IMPLANT PLACEMENT AND FUNCTION IN THE ESTHETIC ZONE WITH STRAUMANN® BLX IMPLANT

A CLINICAL CASE REPORT BY LUIZ OTAVIO CAMARGO, BRAZIL



DETAILS

Treatment Outcome



Intraoral view of the final crown.



Final result with natural esthetics.



Radiographic control 4 years after treatment.

Patient's Experience

"I am very happy with the result. My tooth looks very natural and the entire procedure was very quick and comfortable. In these 4 years, I have not had any problem, it feels like another tooth."

Before



After 4 years



STRAUMANN® iEXCEL

CASES SINGLE-UNIT POSTERIOR ZONE

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CASES SINGLE-UNIT POSTERIOR ZONE



- **Lower molar tooth replacement in healed site with Straumann® BLC implant system**
▶ Algirdas Puišys, Lithuania
- **Non-restorable fractures: Immediate implant placement and bone grafting in a lower molar site with Straumann® BLX implant**
▶ Wong Keng Mun, Singapore
- **Lower molar tooth replacement in healed site with Straumann® TLC implant**
▶ Alessandro Perucchi / Cristian Scognamiglio, Switzerland
- **Maxillary molar replacement using a Straumann® TLX implant and an immediate restoration**
▶ Leandro Nunes, Brazil

LOWER MOLAR TOOTH REPLACEMENT IN HEALED SITE WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY ALGIRDAS PUIŠYS, LITHUANIA

LOWER MOLAR TOOTH REPLACEMENT IN HEALED SITE WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY ALGIRDAS PUIŠYS, LITHUANIA



EXPERT



Algirdas Puišys
Lithuania

DETAILS

- DDS, PHD, SPECIALIST IN PERIODONTOLOGY.
- Executive Director VIC clinic. Graduated as dentist from the University of Vilnius, Lithuania 2002. Graduated as Periodontist from the University of Kaunas.
- 2006 and defended PhD in 2016.
- International lecturer on implantology.
- ITI Fellow.

LOWER MOLAR TOOTH REPLACEMENT IN HEALED SITE WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY ALGIRDAS PUIŠYS, LITHUANIA



DETAILS

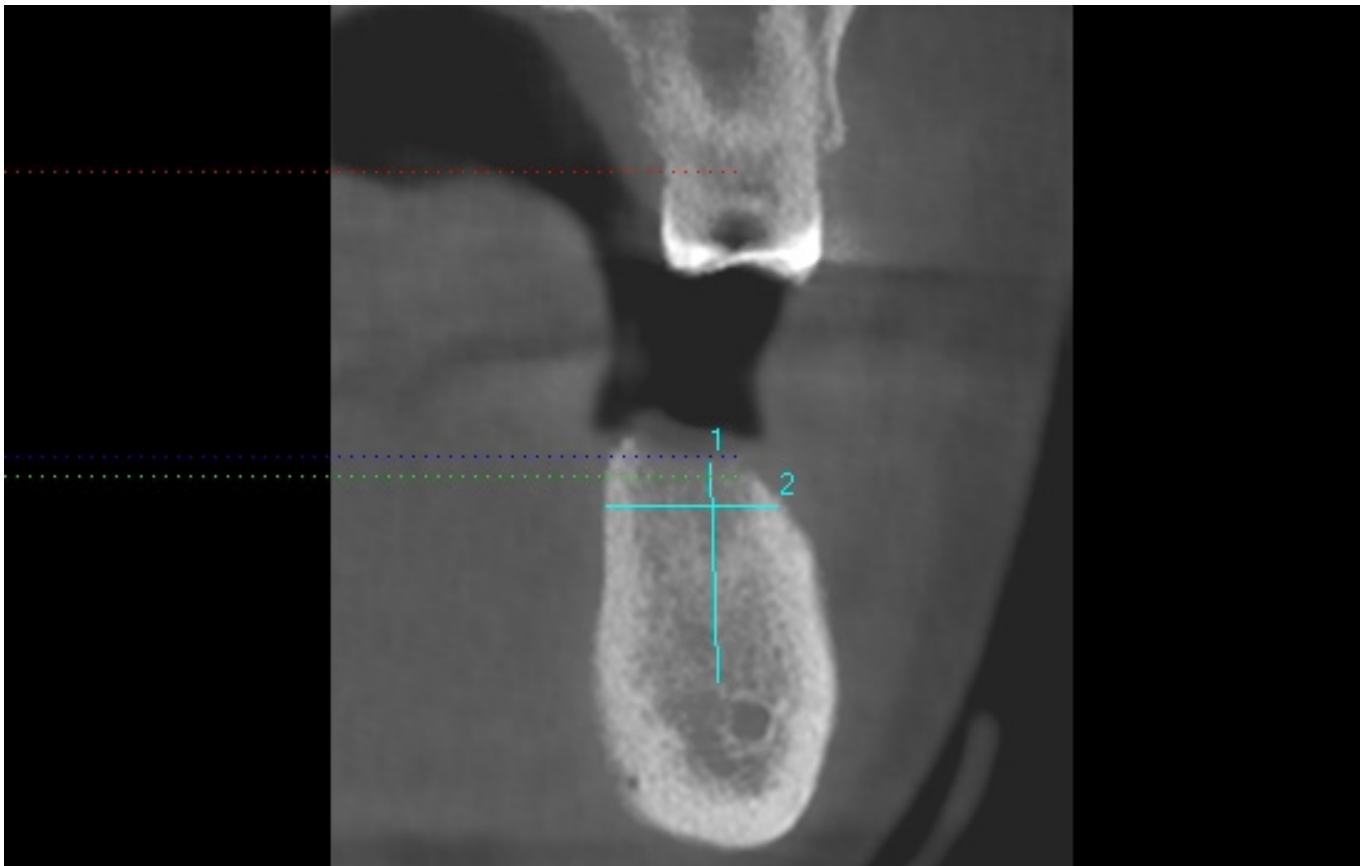
Patient Information

Gender	M
Age	36
Jaw	Mandible
Health status	Healthy
Bone type	D2
Local infection	No
Anatomical defects	No
Risk factors	None

Initial Situation



Intraoral situation of left lower quadrant



CBCT analysis reveals available bone before implantation

Treatment Planning

- The patient’s age, medical conditions, and expectations are evaluated.
- Free-hand surgery.
- Placement of apically tapered implant Straumann® BLC®
Ø 4.5mm 12mm SLActive® Roxolid®.
- Primary stability more than 45 Ncm.
- Conventional loading protocol.

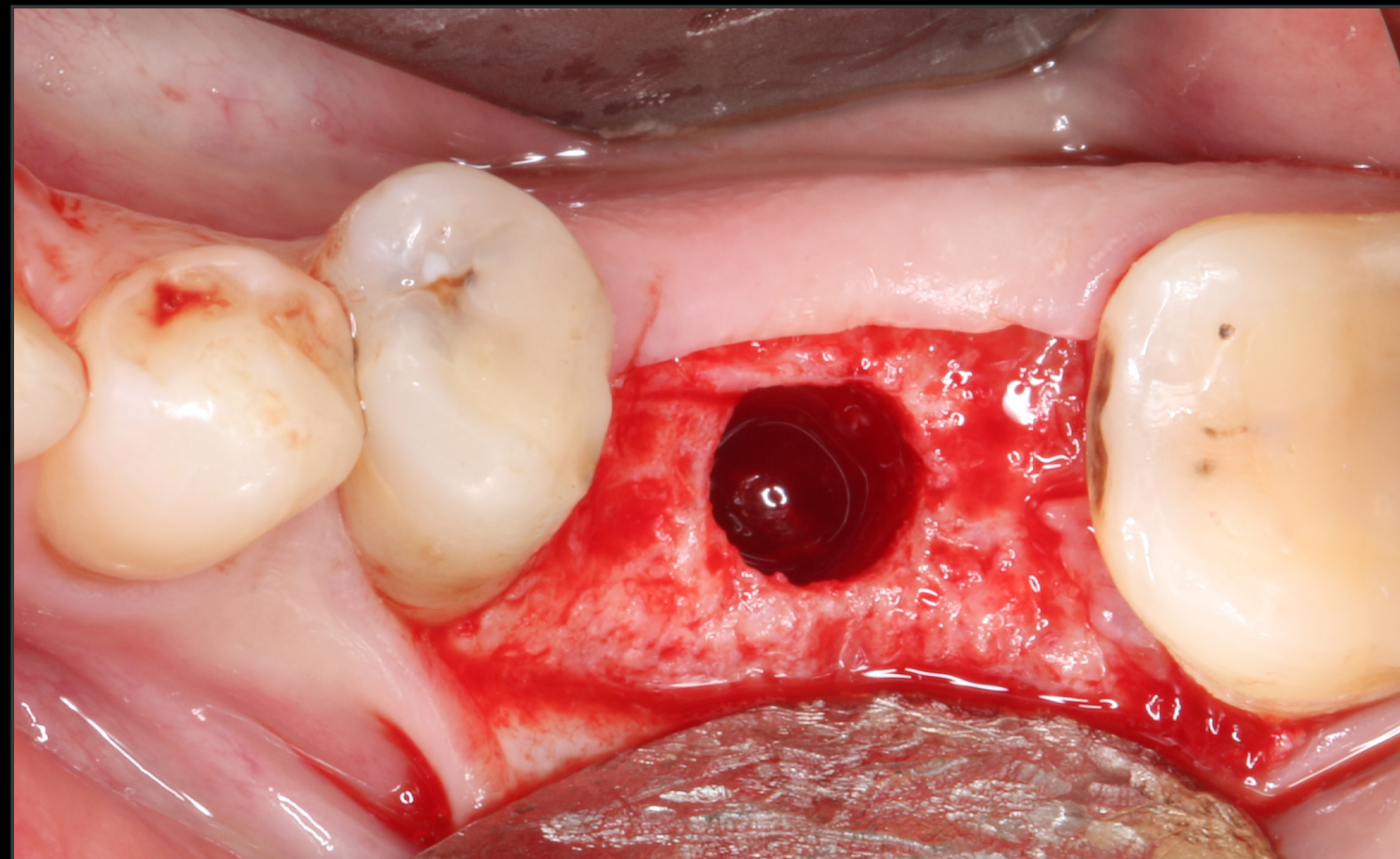
LOWER MOLAR TOOTH REPLACEMENT IN HEALED SITE WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY ALGIRDAS PUIŠYS, LITHUANIA

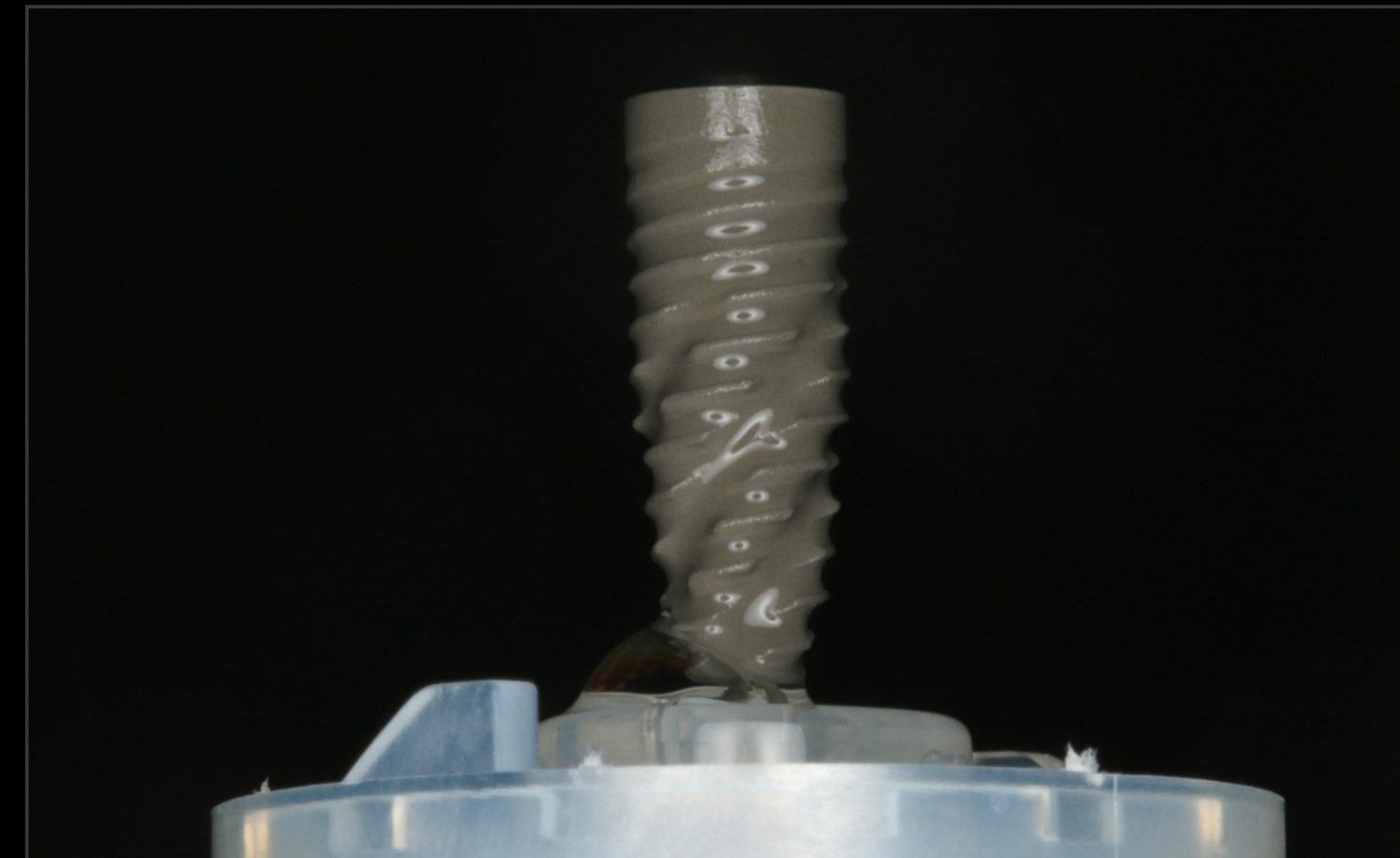


DETAILS

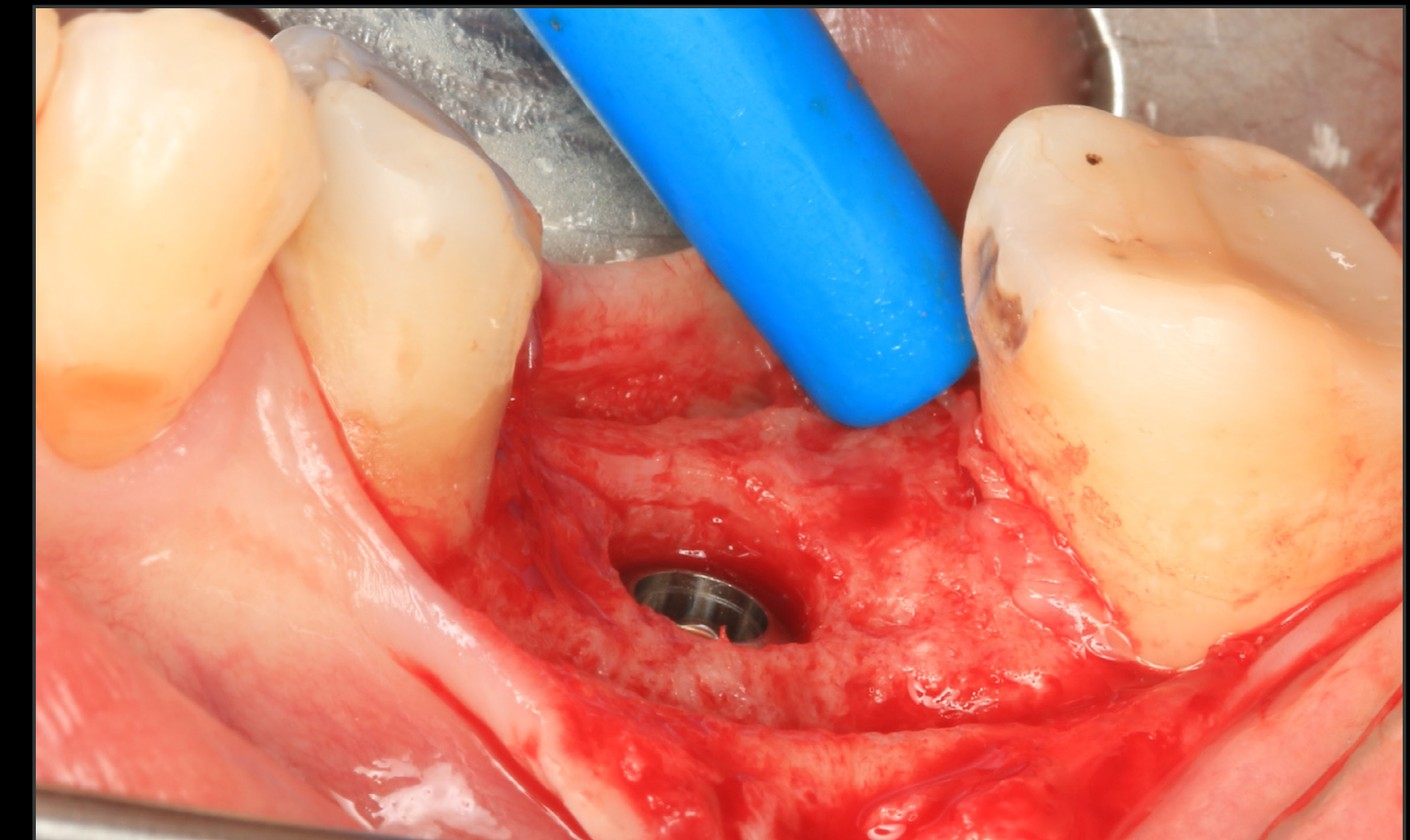
Surgical & Prosthetic Procedures



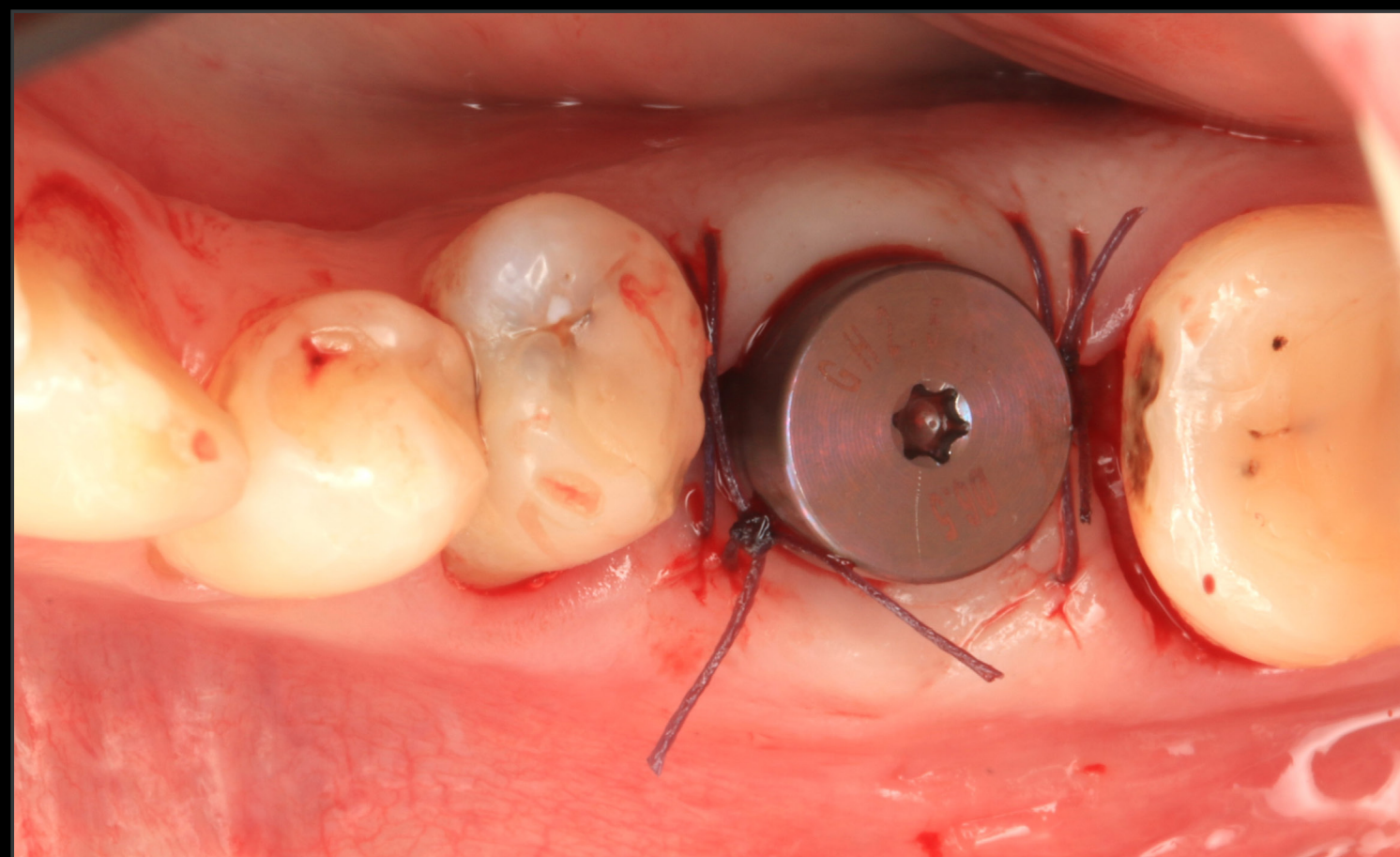
Implant bed ready to receive the implant



Straumann® BLC Ø 4.5 x 12 mm, SLActive®, ROXOLID®



Implant in final position



Healing abutment in place



Radiographical control after insertion of dental implants



12 weeks soft tissue healing

LOWER MOLAR TOOTH REPLACEMENT IN HEALED SITE WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY ALGIRDAS PUIŠYS, LITHUANIA



DETAILS

Treatment Outcome



Definitive screw-retained implant crown



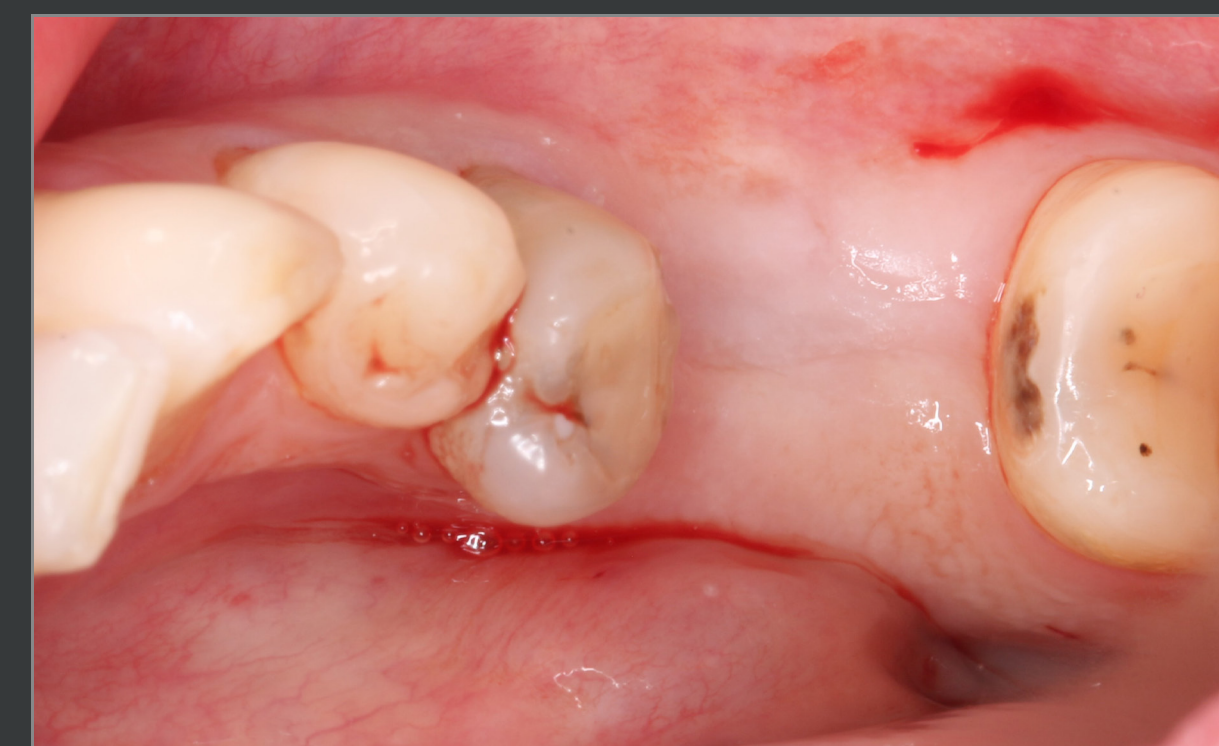
Radiographic control. Final crown cemented to Variobase® abutment screw-retained in final position

Algirdas Puišys

“After 5 years of using BLX, I changed my mind completely - connection is awesome - crestal bone stability is outstanding!”

“Results what I see after using it surpassed my expectations”

Before



After 12 weeks



NON-RESTORABLE FRACTURES: IMMEDIATE IMPLANT PLACEMENT AND BONE GRAFTING IN A LOWER MOLAR SITE WITH STRAUMANN BLX

A CLINICAL CASE REPORT BY WONG KENG MUN, SINGAPORE

NON-RESTORABLE FRACTURES: IMMEDIATE IMPLANT PLACEMENT AND BONE GRAFTING IN A LOWER MOLAR SITE

A CLINICAL CASE REPORT BY WONG KENG MUN, SINGAPORE



EXPERT



Wong Keng Mun

Singapore

DETAILS

- BDS degree from the National University of Singapore.
- Master's degree MSD and Certificate in Prosthodontics from the University of Washington, USA.
- Affiliate Assistant Professor at the University of Washington, USA.
- Visiting Senior Lecturer at the National University of Singapore.
- Chairman and Managing Director of T32 Dental Group Pte Ltd.
- ITI fellow.

Feedback from the Clinician

"Immediate loading in molar sites requires some critical elements: intact socket walls and, to achieve high initial stability with a high insertion torque value ; this enables soft-tissue architecture to be preserved with a reduced number of surgical procedures, expressed in fewer clinic visits and thus better patient acceptance due to overall shorter treatment times."

NON-RESTORABLE FRACTURES: IMMEDIATE IMPLANT PLACEMENT AND BONE GRAFTING IN A LOWER MOLAR SITE

A CLINICAL CASE REPORT BY WONG KENG MUN, SINGAPORE



DETAILS

Patient’s Chief Complaint

“I have a tooth that hurts when I bite, I would like to restore it in the shortest time possible to be able to eat with peace of mind.”

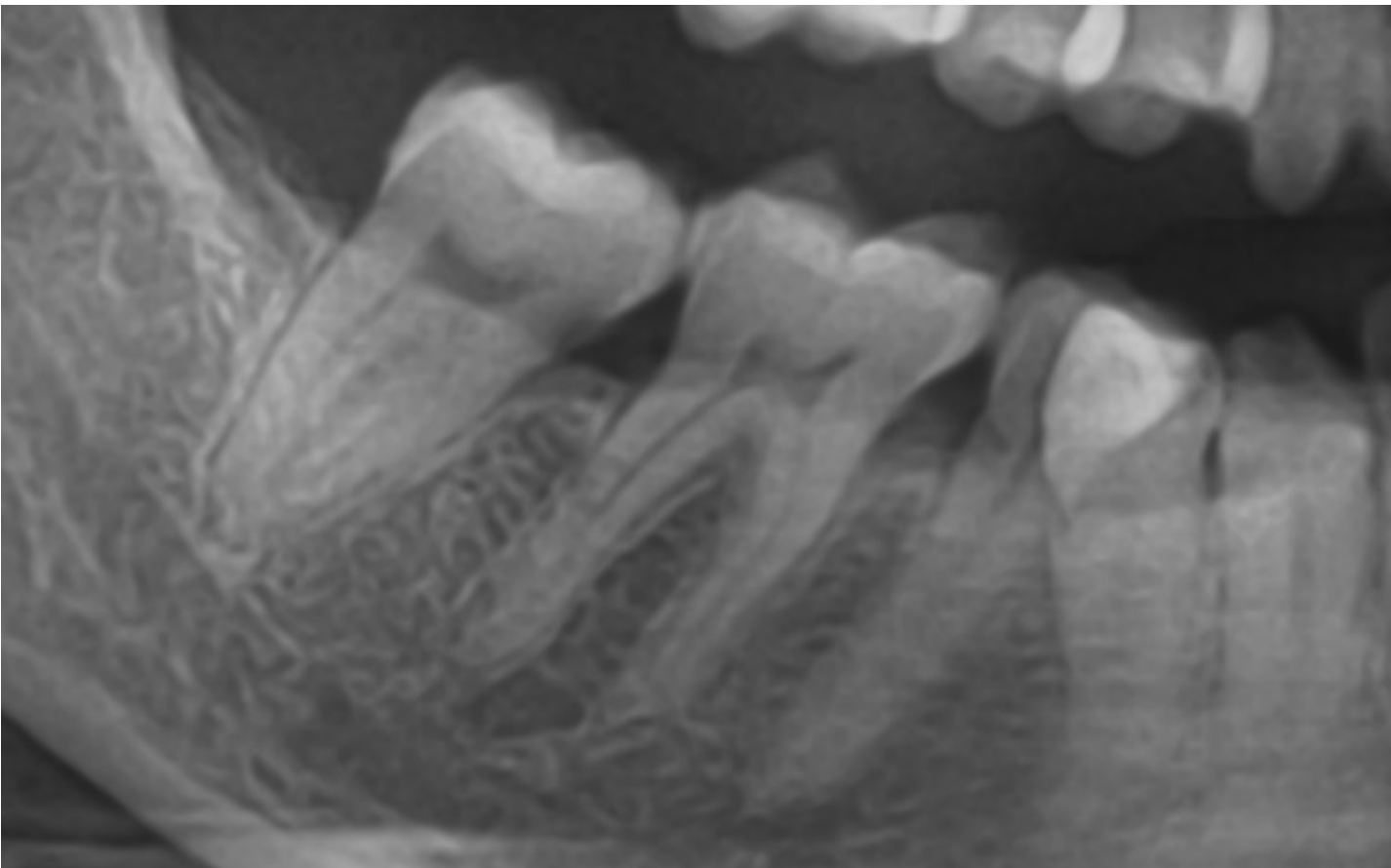
Patient Information

Age	48
Jaw	Mandible
Health status	Good
Smile line	Medium
Bone type	Medium
Local infection	Yes Controlled
Anatomical defects	No
Risk factors	No

Initial Situation



Coronal fracture visible on tooth #46 with crack line across the pulp floor



Periapical radiography of tooth #46

Treatment Planning

- Multi-rooted molar section prior to extraction to allow elevation and removal of individual roots.
- Selection of implant design to ensure primary stability.
- Selection of appropriate implant diameter to ensure space for bone grafting.
- Straumann® BLX SLActive® Roxolid® implant placement.
- Surrounding gaps filled with bone substitute.
- Temporary crown delivery after implant insertion.
- Final screw-retained zirconia crown delivery 4 months after surgery.

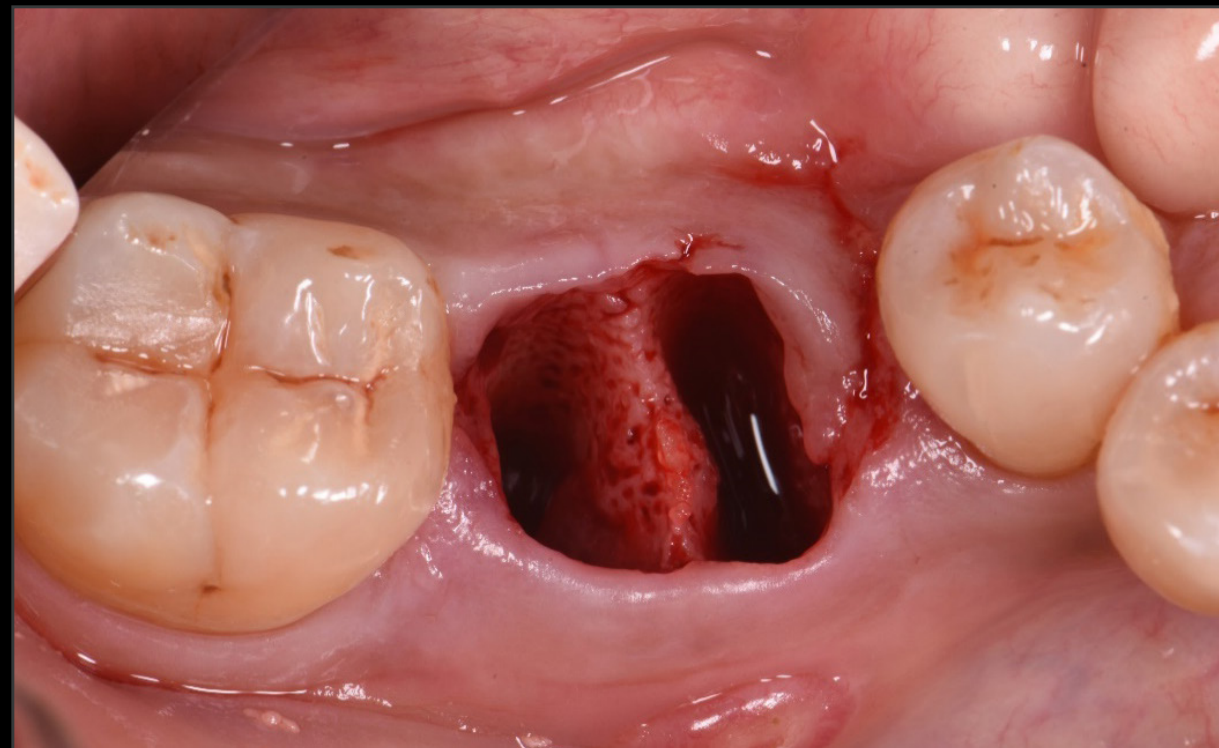
NON-RESTORABLE FRACTURES: IMMEDIATE IMPLANT PLACEMENT AND BONE GRAFTING IN A LOWER MOLAR SITE

A CLINICAL CASE REPORT BY WONG KENG MUN, SINGAPORE

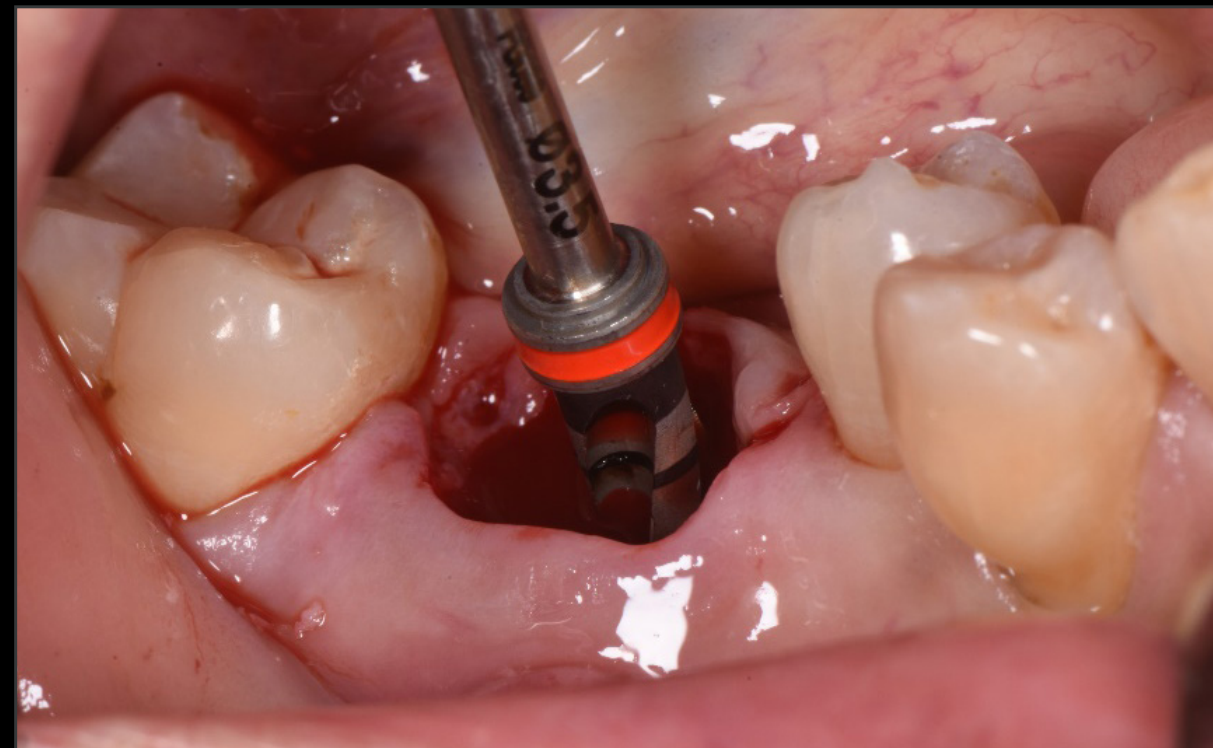


DETAILS

Surgical & Prosthetic Procedures



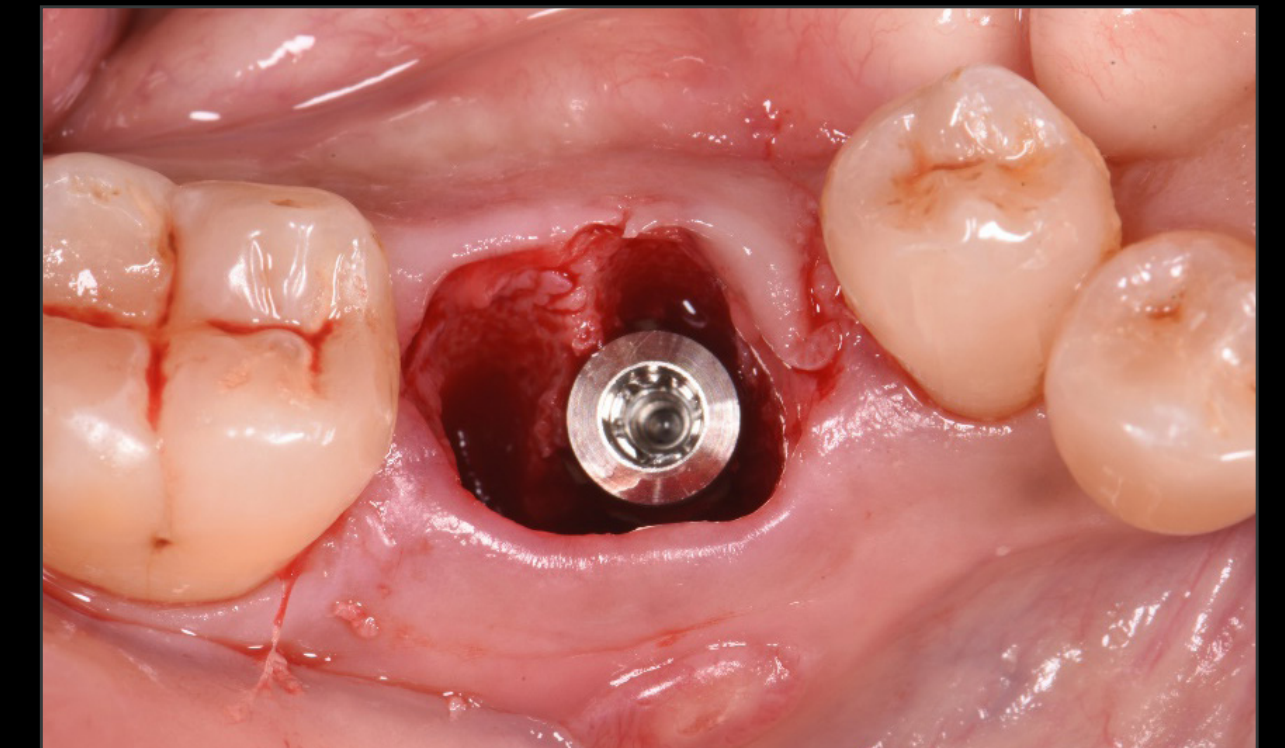
Atraumatic extraction of tooth #46:
intact socket walls



Sequential implant site preparation



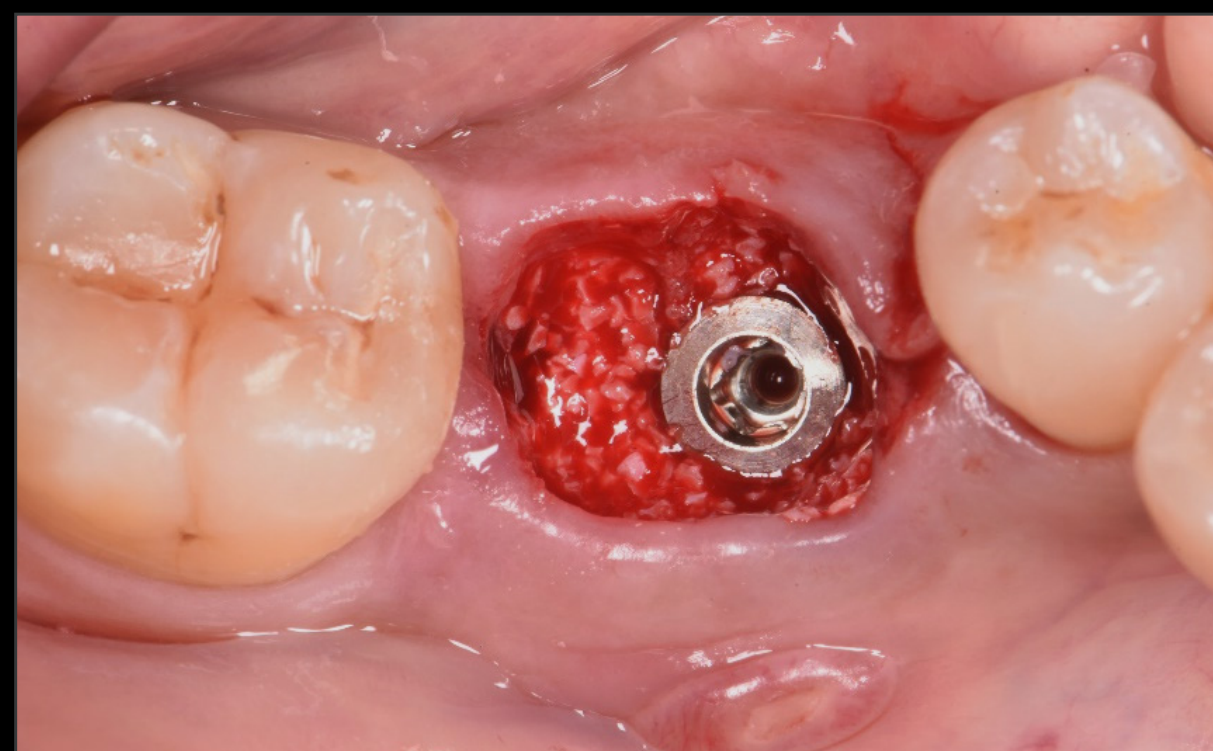
Straumann® BLX Implant Ø 5.5 x 12mm
SLActive® Roxolid®



Implant in position with primary stability
Initial torque value of >35Ncm achieved



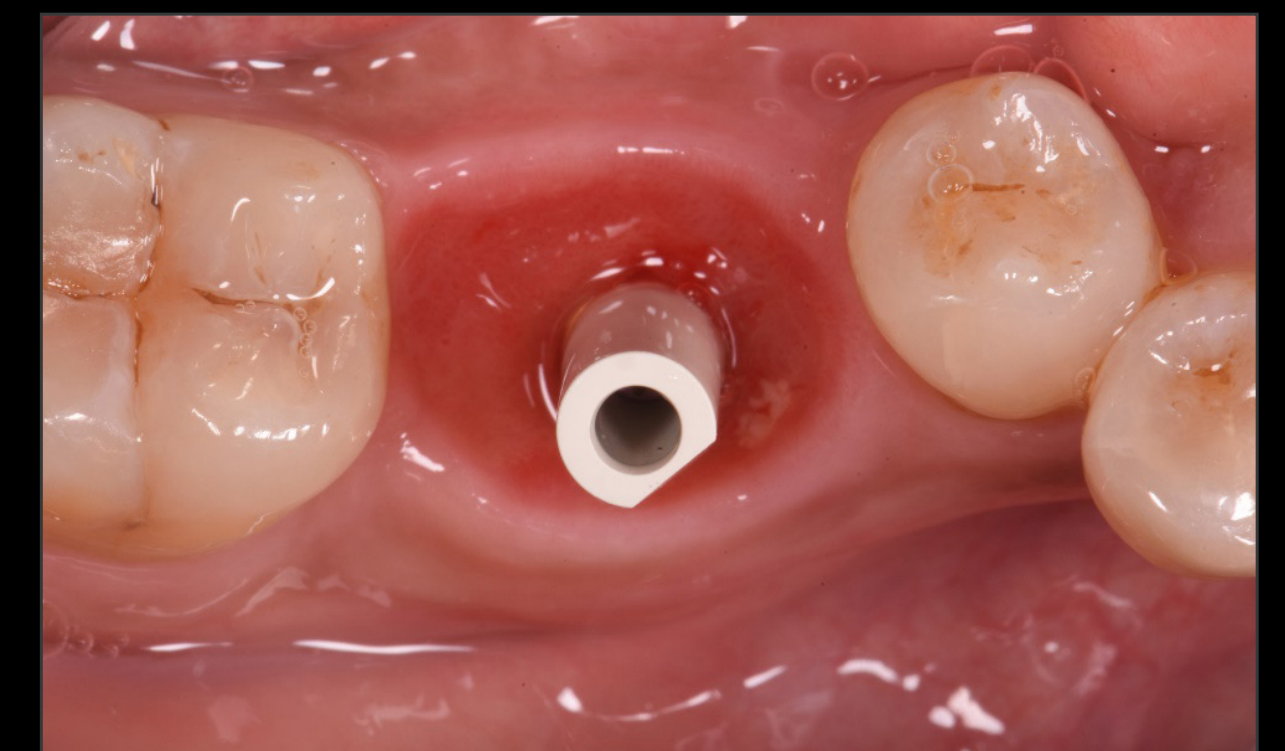
Temporary WB abutment customized for
proper occlusal relationship



Surrounding gaps filled with bone substitute



Provisional screw-retained crown in position



3 months later: scanbody in position for
digital impression

NON-RESTORABLE FRACTURES: IMMEDIATE IMPLANT PLACEMENT AND BONE GRAFTING IN A LOWER MOLAR SITE

A CLINICAL CASE REPORT BY WONG KENG MUN, SINGAPORE



DETAILS

Treatment Outcome



Final full zirconia crown



Definitive screw-retained crown delivery
3 months after surgery



Radiographic control at 4 months

Patient's Experience

"Even though I had to lose my tooth, I was very relieved to know that I could have a provisional tooth from the very beginning. My new tooth looks and feels very natural, I am very happy with the results."

Before



After 4 months



LOWER MOLAR TOOTH REPLACEMENT IN HEALED SITE WITH STRAUMANN TLC

**A CLINICAL CASE REPORT BY
ALESSANDRO PERUCCHI / CRISTIAN SCOGNAMIGLIO, SWITZERLAND**

LOWER MOLAR TOOTH REPLACEMENT IN HEALED SITE WITH STRAUMANN TLC

A CLINICAL CASE REPORT BY ALESSANDRO PERUCCHI / CRISTIAN SCOGNAMIGLIO, SWITZERLAND



EXPERT



Alessandro Perucchi
Switzerland



Cristian Scognamiglio
Switzerland

DETAILS

ALESSANDRO PERUCCHI

- DDS, Specialist in dental surgery.
- Graduated in Dental Medicine in 2005 in Bern.
- In 2011 he qualified as a Specialist in dental surgery.
- Opened his own dental clinic in 2012 in Mendrisio. Since 2007, he has acted as a speaker at universities and training courses across Switzerland and Europe.
- Author of several scientific publications.
- Member of SSO, EAO, ITI and founder of MINEC.

CRISTIAN SCOGNAMIGLIO

- DDS, Graduated in dentistry from University of Varese (Italy in 2018)
- Clinician at the Dr. Alessandro Perucchi Private Dental Clinic from 2020 and from 2022 collaborator for oral surgery at “Studio Vanini”, both in Switzerland.
- Speaker for national and international courses.
- Active member of SSO (Swiss Dental Association), DDS (Digital Dentistry Society), EAO (European association for Osseointegration), ITI (International Team for Implantology) and OMDCT (Canton Ticino Dental Association).

LOWER MOLAR TOOTH REPLACEMENT IN HEALED SITE WITH STRAUMANN TLC

A CLINICAL CASE REPORT BY ALESSANDRO PERUCCHI / CRISTIAN SCOGNAMIGLIO, SWITZERLAND

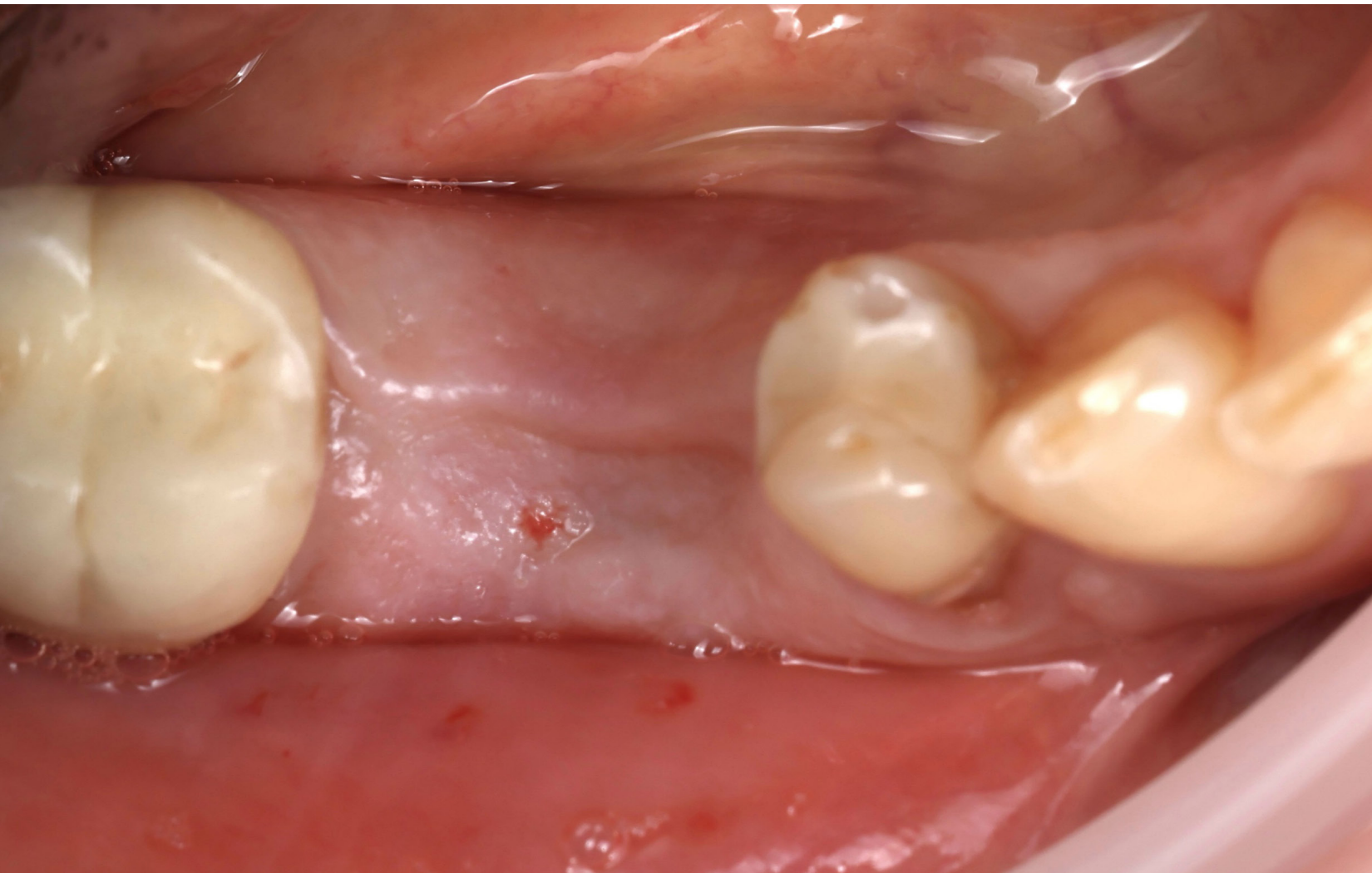


DETAILS

Patient Information

Gender	F
Age	67
Jaw	Mandible
Health status	Good
Bone type	Type 2
Local infection	No
Anatomical defects	No
Risk factors	Smoker

Initial Situation



Intraoral situation of right lower quadrant



CBCT analysis reveals available bone before implantation

Treatment Planning

- Digital planification to establish an implant prosthetically-driven position.
- Free-hand surgery.
- Placement of apically tapered implant Straumann® TLC®
Ø 4.5mm x 10mm SLActive® Roxolid®.
- Primary stability more than 45 Ncm.
- After 14 weeks, delivery of the digitally fabricated screw-retained crown.

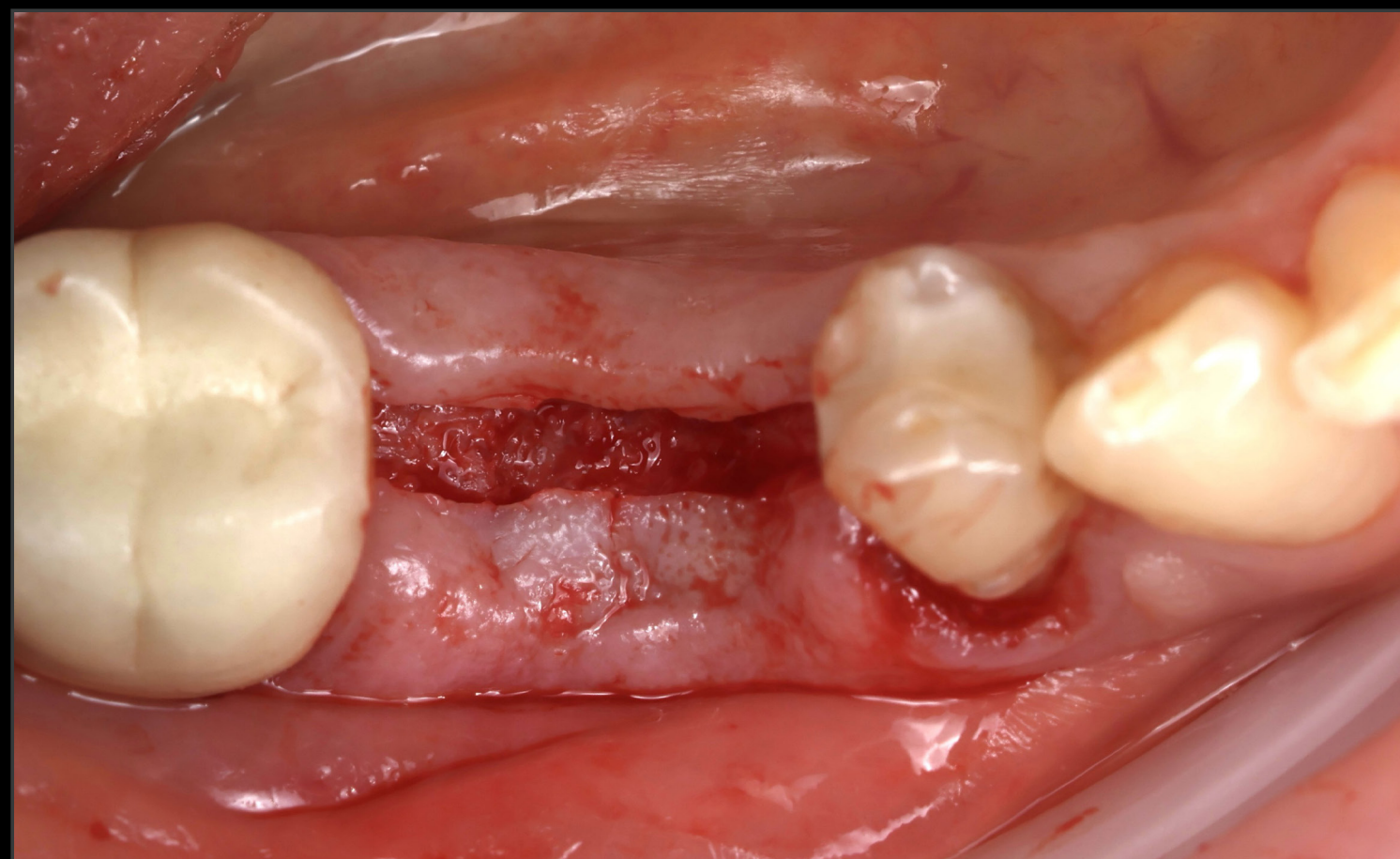
LOWER MOLAR TOOTH REPLACEMENT IN HEALED SITE WITH STRAUMANN TLC

A CLINICAL CASE REPORT BY ALESSANDRO PERUCCHI / CRISTIAN SCOGNAMIGLIO, SWITZERLAND

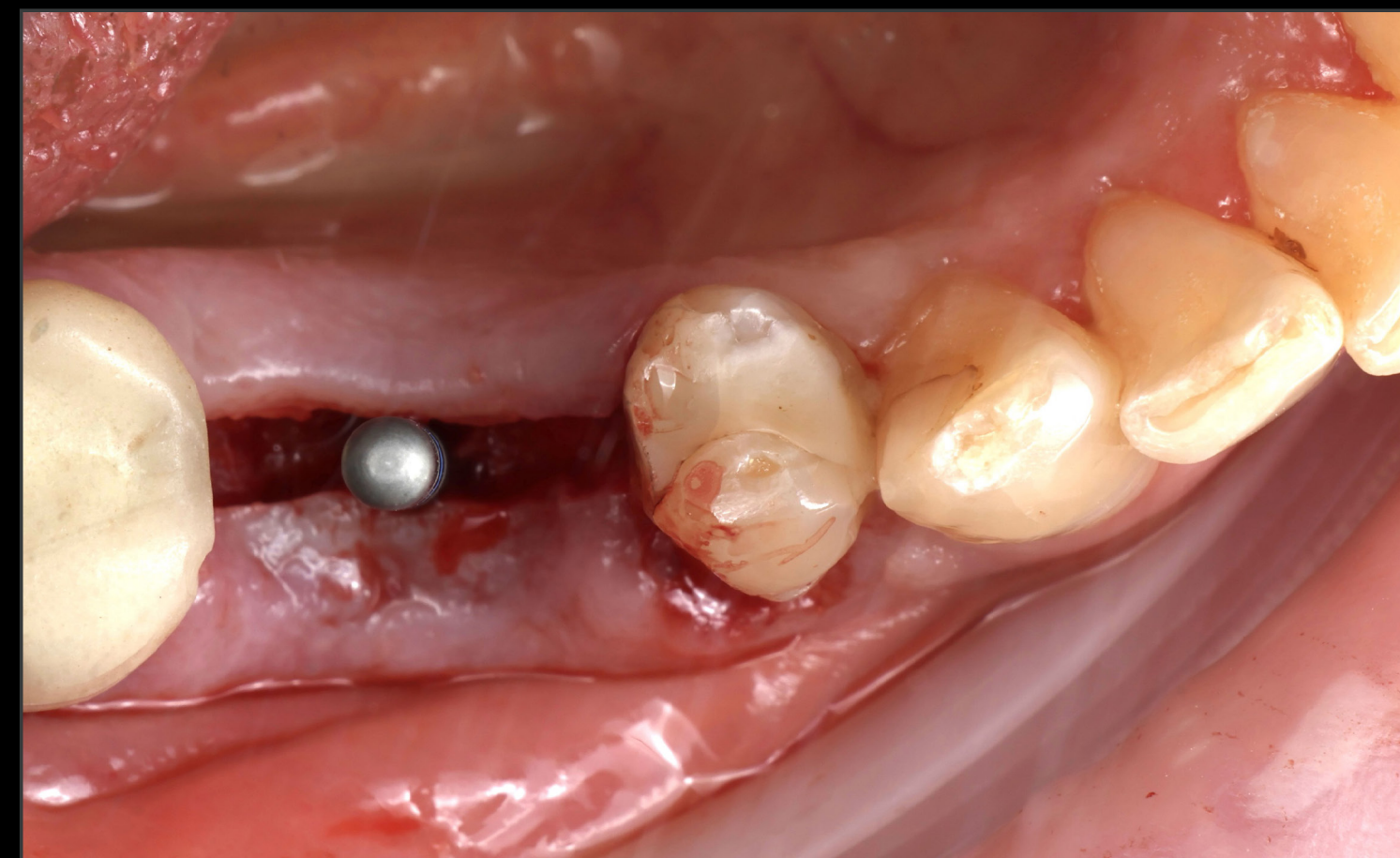


DETAILS

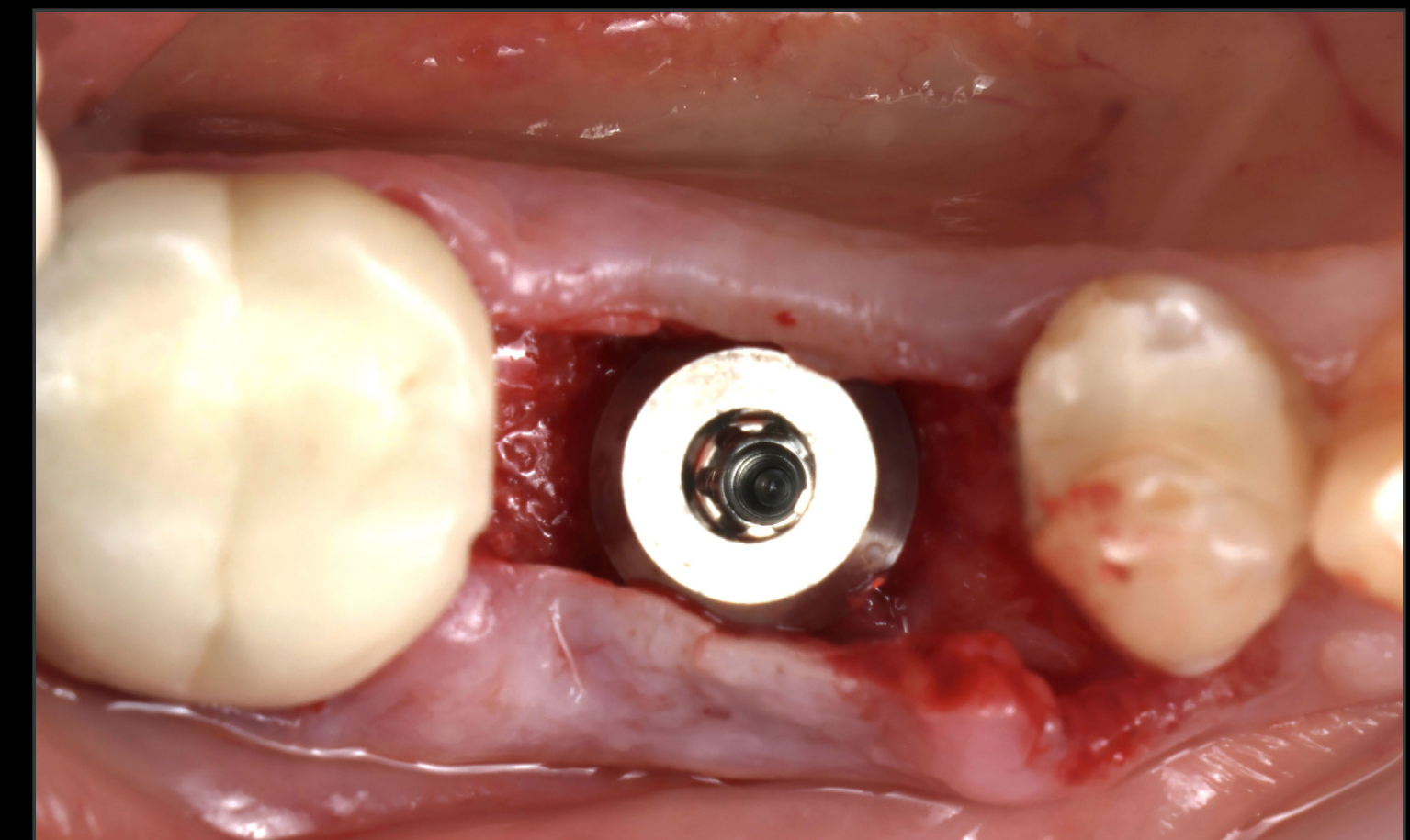
Surgical & Prosthetic Procedures



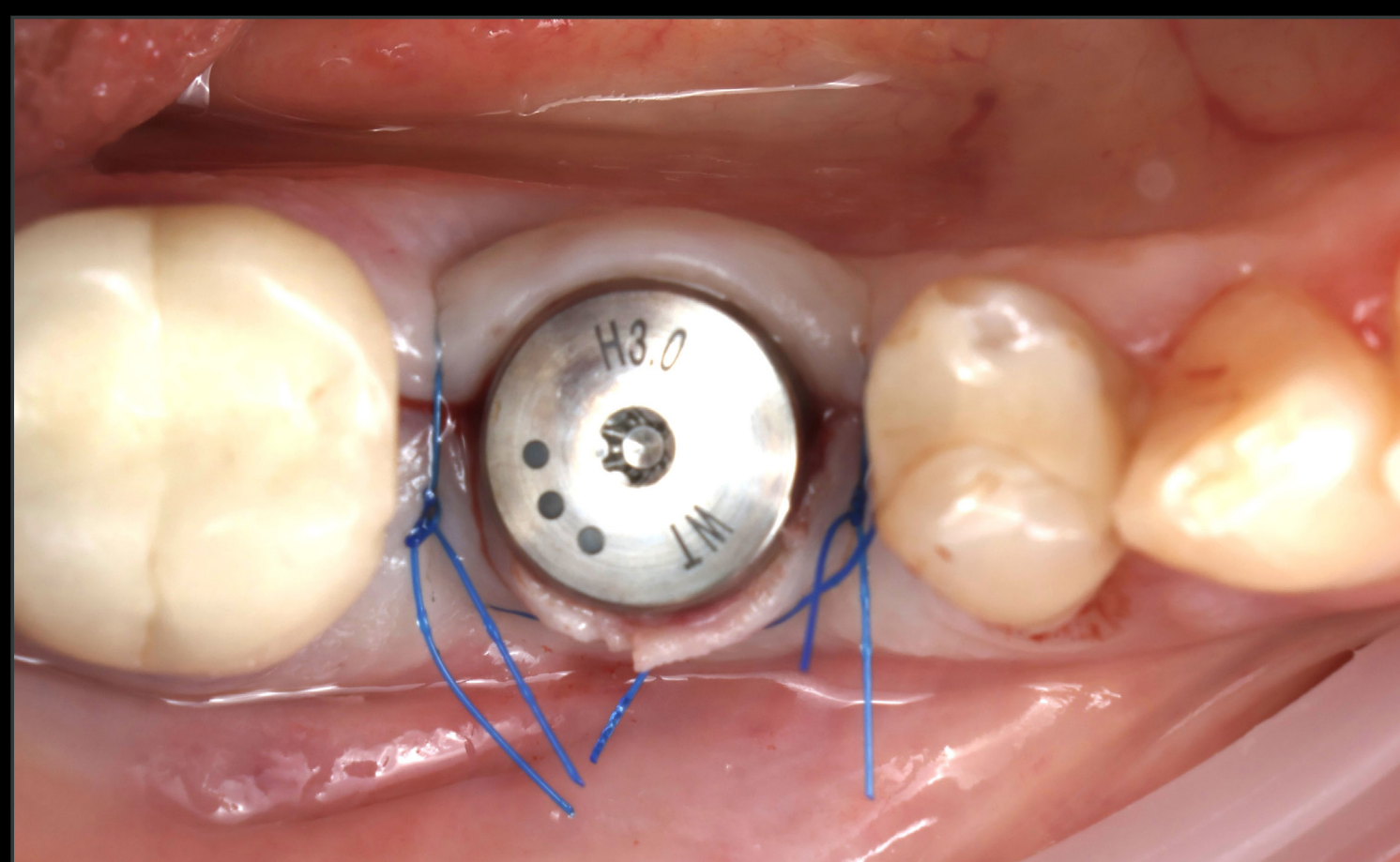
Full-thickness flap was raised to allow access to the bone and evaluate the local anatomy



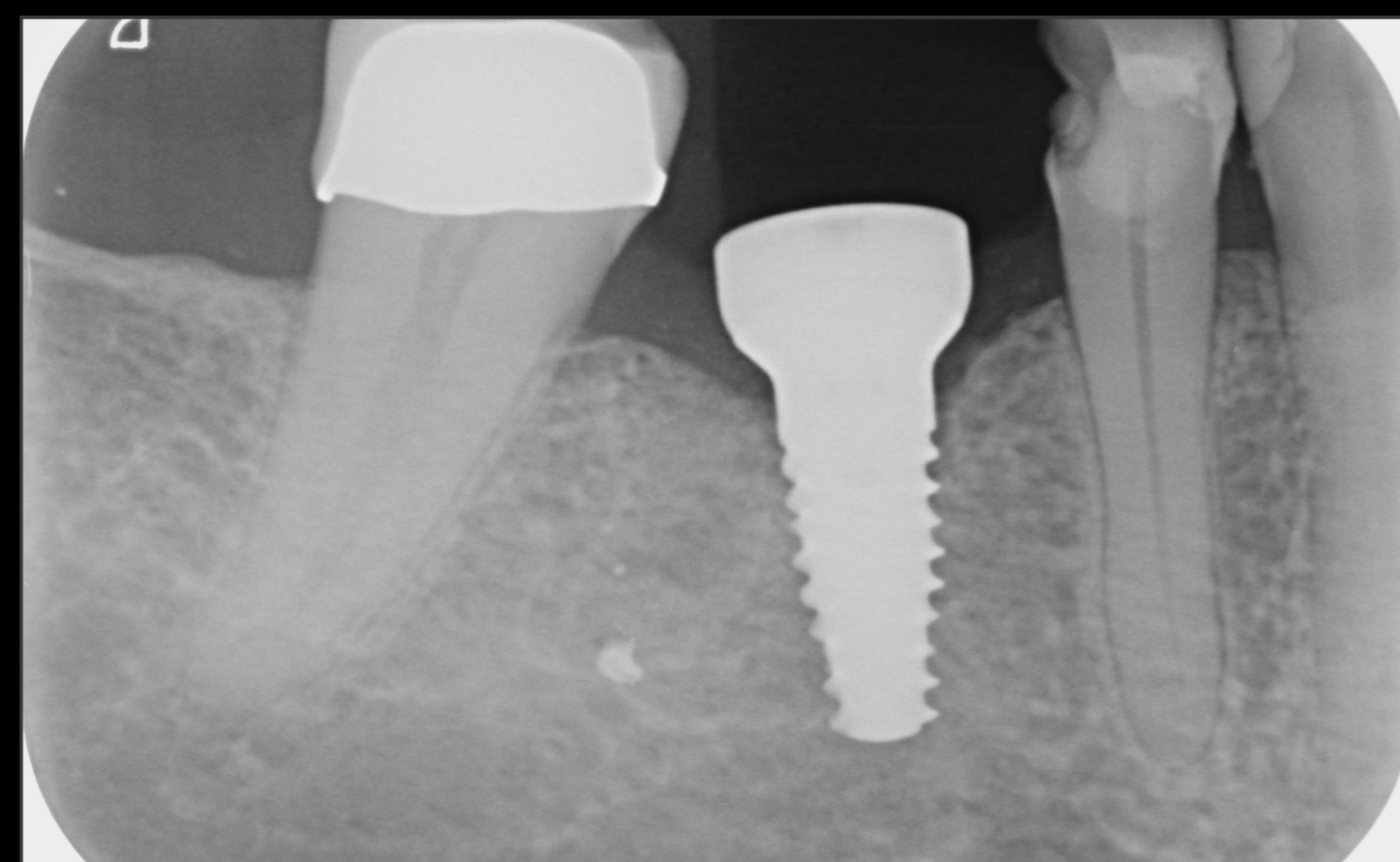
Alignment pin placed to check the 3D position of the osteotomy and preparation depth



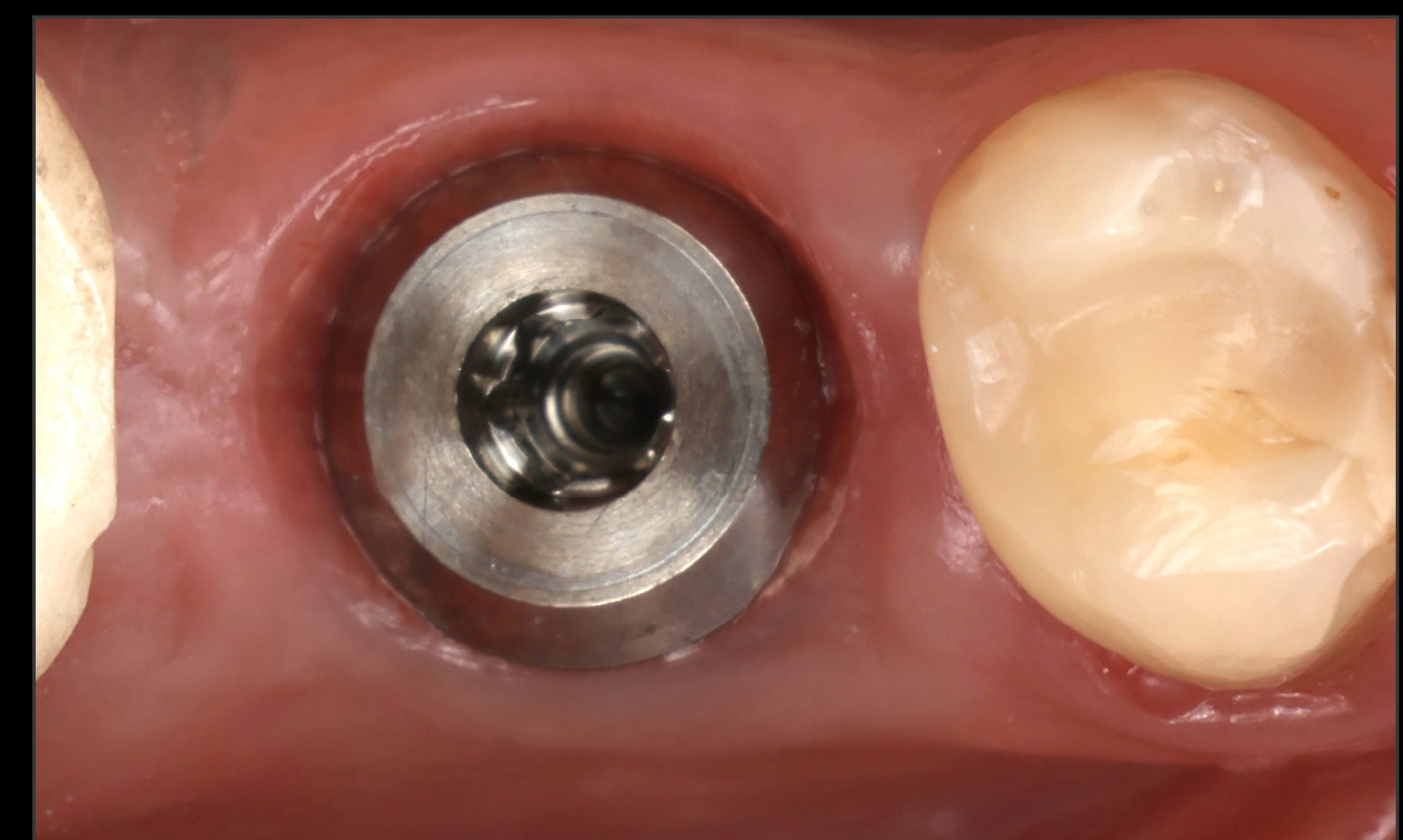
Implant in final position



Healing abutment in place



Radiographical control after insertion of dental implants



14 weeks soft tissue healing

LOWER MOLAR TOOTH REPLACEMENT IN HEALED SITE WITH STRAUMANN TLC

A CLINICAL CASE REPORT BY ALESSANDRO PERUCCHI / CRISTIAN SCOGNAMIGLIO, SWITZERLAND



DETAILS

Surgical & Prosthetic Procedures



Scanbody for digital impression



Definitive screw-retained crown



Final customized restoration cemented extra orally



Definitive screw-retained crown in position

LOWER MOLAR TOOTH REPLACEMENT IN HEALED SITE WITH STRAUMANN TLC

A CLINICAL CASE REPORT BY ALESSANDRO PERUCCHI / CRISTIAN SCOGNAMIGLIO, SWITZERLAND

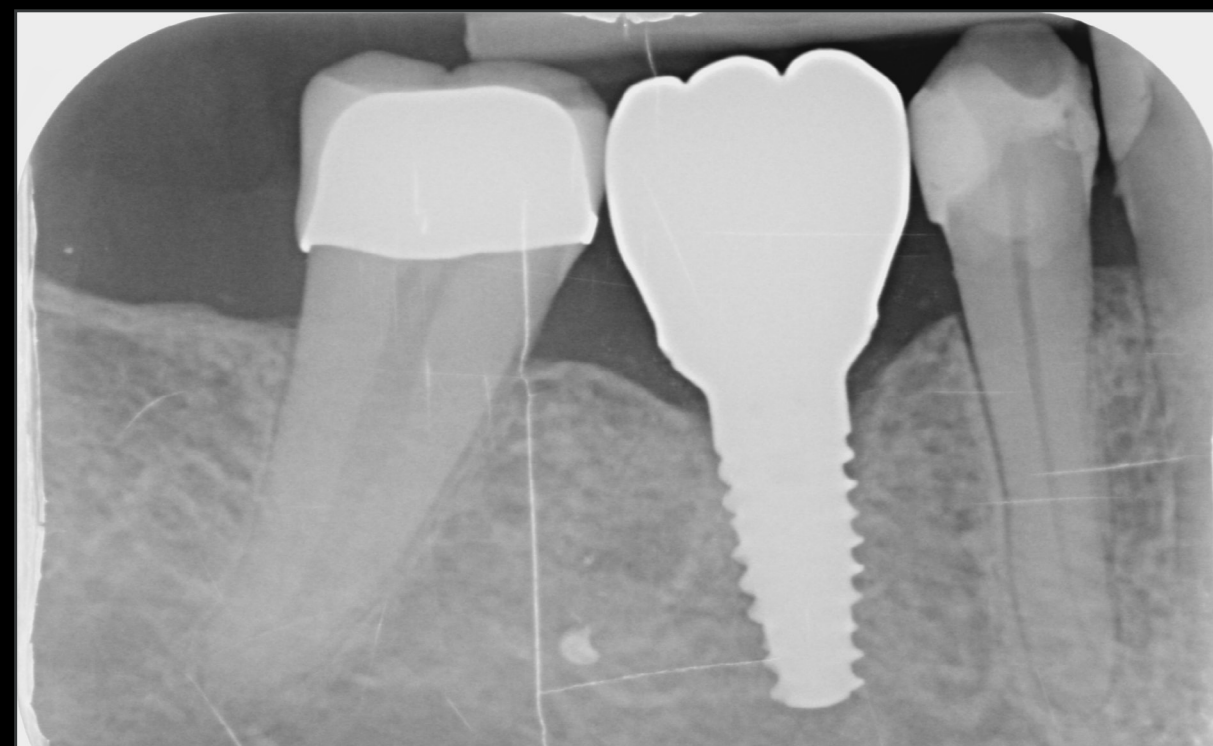


DETAILS

Treatment Outcome



Final screw-retained crown in position



Radiographic control. Final crown cemented to Variobase® abutment screw-retained in final position

Alessandro Perucchi & Cristian Scognamiglio

"In this implant we found a great innovation, we have the same connection of the BLX and the BLC, we can use the same kit and at the same time we can have a really high primary stability, the primary stability is something that we have noticed with TLC, we are users of the classic Straumann Standard Plus Tissue Level but this new version it's really great thanks to the macro-geometry because we are able to reach high primary stability and a predictable success."

Before



After 14 weeks



MAXILLARY MOLAR REPLACEMENT USING A STRAUMANN® TLX IMPLANT AND AN IMMEDIATE RESTORATION

A CLINICAL CASE REPORT BY LEANDRO NUNES, BRAZIL

MAXILLARY MOLAR REPLACEMENT USING A STRAUMANN® TLX IMPLANT AND AN IMMEDIATE RESTORATION

A CLINICAL CASE REPORT BY LEANDRO NUNES, BRAZIL



EXPERT



Leandro Nunes

Brazil

DETAILS

- Graduated in dentistry from the Federal University of Rio Grande do Sul, Brazil
- Specialized in Oral and Maxillofacial Surgery at The Lutheran University of Brazil (ULBRA-RS)
- Master of Science from the University of Sao Paulo, Bauru, Brazil
- Doctorate from the Pontifical Catholic University of Rio Grande do Sul, Brazil (PUCRS)
- Professor of Implant Dentistry at the Brazilian Dental Association
- ITI fellow and ITI Study Club Director in Porto Alegre, Brazil

Feedback from the Clinician

“Replacing one tooth in the posterior zone and loading it immediately can pose many challenges. Since the key is to identify who is eligible for this type of treatment, patient selection is crucial. In this case, we obtained good and predictable results in a short time as requested by the patient. The Straumann® TLX allows the implant to be loaded immediately, which in our case proved highly satisfactory in terms of health, esthetics, and function.”

MAXILLARY MOLAR REPLACEMENT USING A STRAUMANN® TLX IMPLANT AND AN IMMEDIATE RESTORATION

A CLINICAL CASE REPORT BY LEANDRO NUNES, BRAZIL



DETAILS

Patient’s Chief Complaint

“I lost a tooth a few years ago, and I feel like I can’t eat or smile the same as before, there is a space that I find unpleasant. Is it possible to restore it without having to wait so long?”

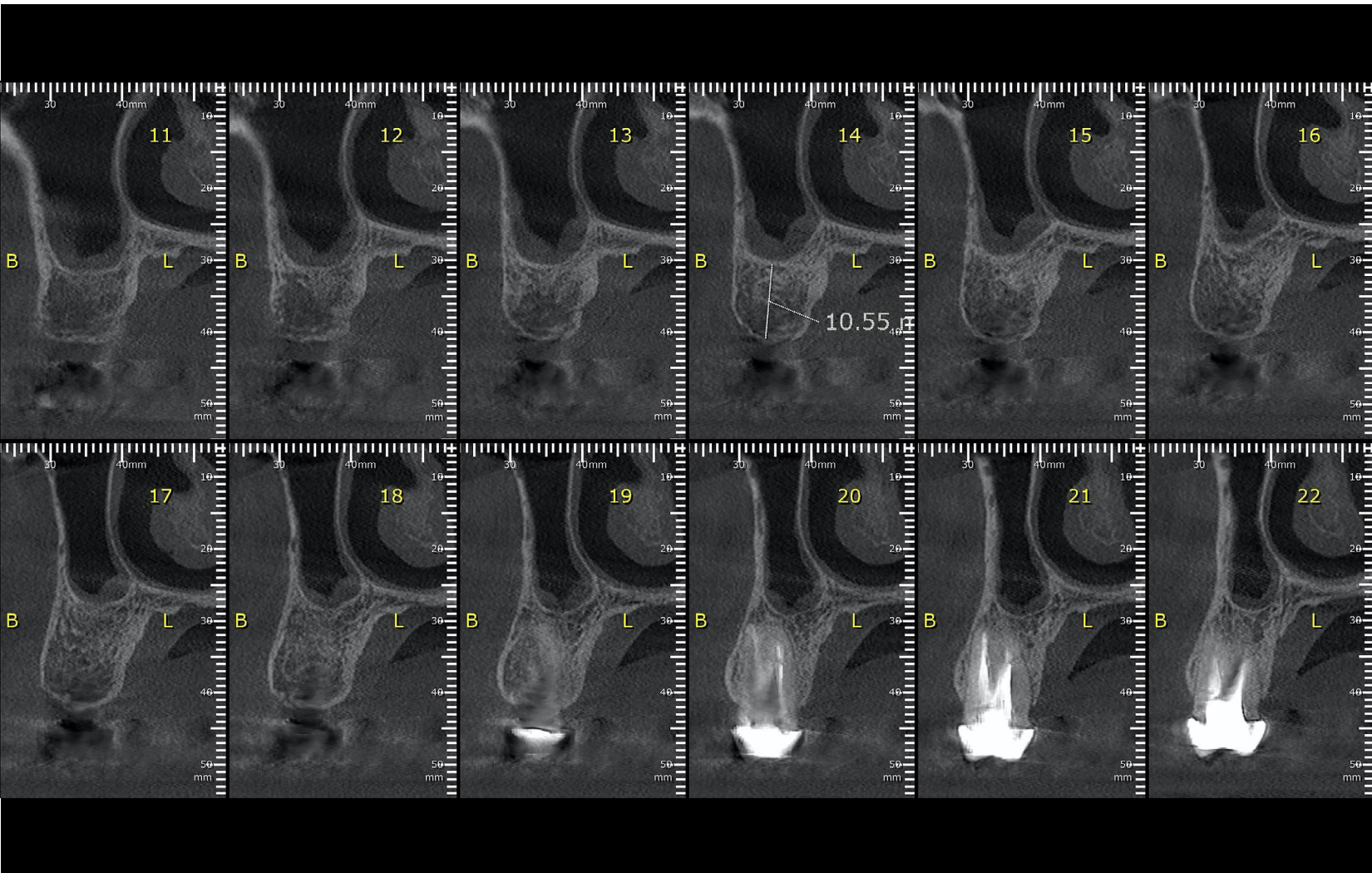
Patient Information

Age	40
Jaw	Maxilla
Health status	Good
Smile line	High
Bone type	Type 2
Local infection	No
Anatomical defects	No
Risk factors	No

Initial Situation



Intraoral view of the alveolar ridge in #16 zone.



CBCT scans of #16 zone, revealing adequate horizontal and vertical dimensions for primary implant stability.

Treatment Planning

- Digital planification to establish an implant prosthetically-driven position
- Selection of implant design and diameter to ensure primary stability
- Straumann® TLX Standard Plus Roxolid® 3.75 × 10 mm with immediate provisionalization
- After 2 months, delivery of the digitally fabricated screw-retained crown
- Follow-up visits every 6 months

MAXILLARY MOLAR REPLACEMENT USING A STRAUMANN® TLX IMPLANT AND AN IMMEDIATE RESTORATION

A CLINICAL CASE REPORT BY LEANDRO NUNES, BRAZIL



DETAILS

Surgical & Prosthetic Procedures



Needle drill Ø1.6 mm used to mark the implant site.



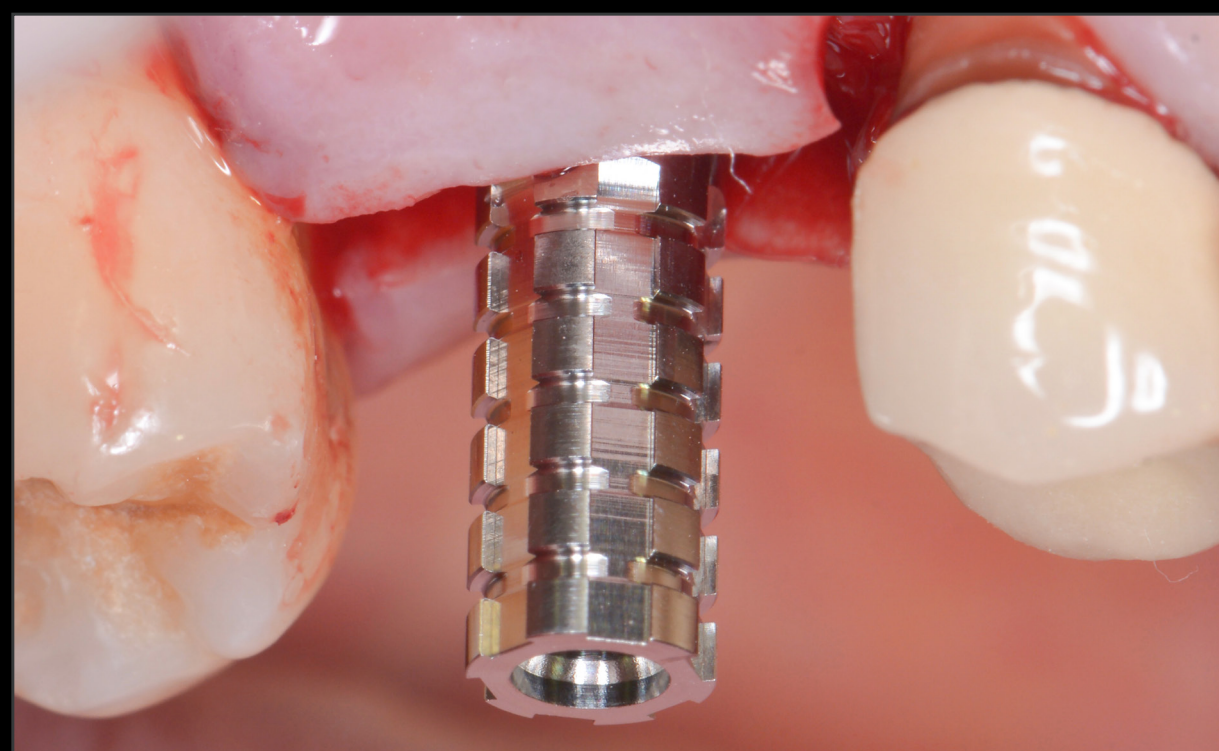
Alignment pin placed to check the 3D position of the osteotomy and preparation depth.



Straumann® TLX implant placed with a surgical ratchet with a torque value > 35 Ncm.



Optimal primary stability achieved.



Straight temporary titanium abutment.



Temporary crown in place.



Digital impression with Straumann® Virtuo Vivo™ Intraoral Scanner, 2 months after surgery.



Digitally fabricated zirconia crown.

MAXILLARY MOLAR REPLACEMENT USING A STRAUMANN® TLX IMPLANT AND AN IMMEDIATE RESTORATION

A CLINICAL CASE REPORT BY LEANDRO NUNES, BRAZIL



DETAILS

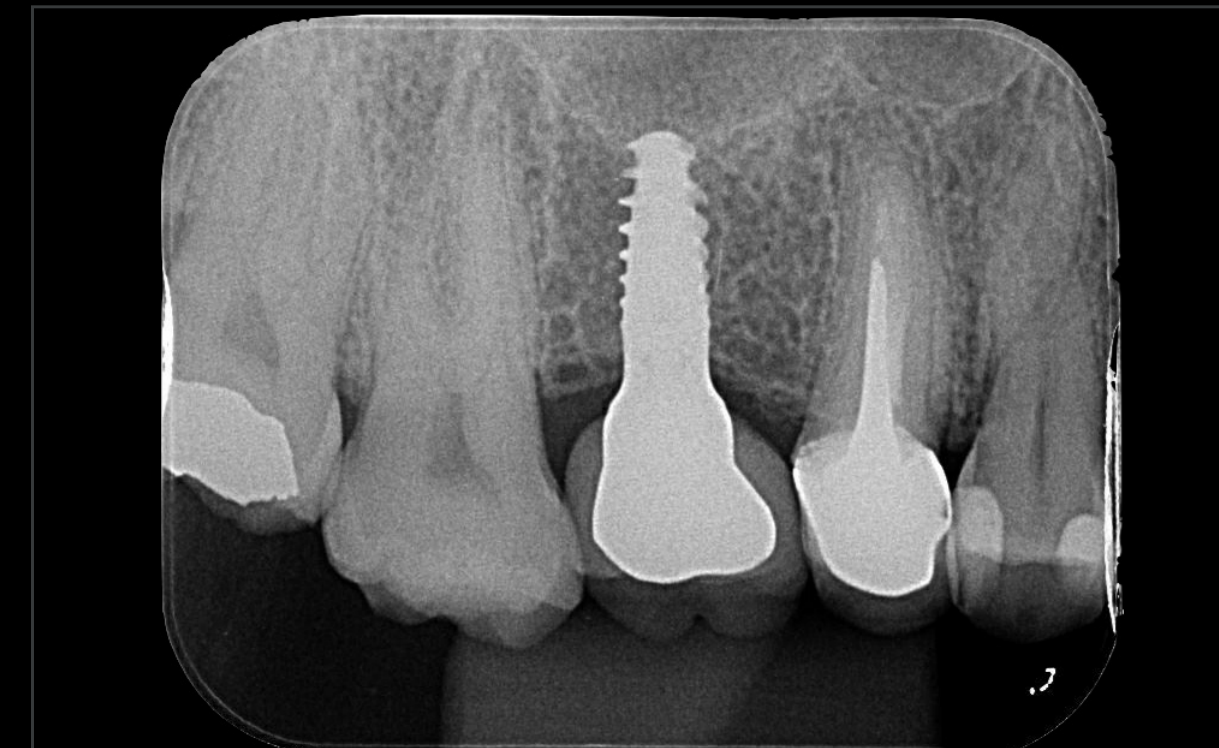
Treatment Outcome



Lateral view of the prosthetically-driven final implant-supported restoration.



Screw access hole sealed with a composite material.



Radiographic control 6 months after definitive crown delivery.

Patient's Experience

"I am very happy with the results, from an esthetic and functional point of view, which I have been able to verify from the first moment. It has improved my quality of life; now I can eat better and I enjoy smiling without covering my mouth."

Before



After 6 months



STRAUMANN® iEXCEL

CASES MULTIPLE-UNIT ANTERIOR ZONE

iEXCEL 

STRAUMANN®
PERFORMANCE
SYSTEM

CASES MULTIPLE-UNIT ANTERIOR ZONE



- **Maxillary esthetic bridge in a regenerated bone area with immediate loading with Straumann® BLC implant**
▶ France Lambert, Belgium
- **Rehabilitation of hopeless mandibular incisors with immediate implant placement and provisionalization using a digital workflow with Straumann® BLX implant**
▶ Jeanette Chua, Malaysia

MAXILLARY ESTHETIC BRIDGE IN A REGENERATED BONE AREA WITH IMMEDIATE LOADING WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY FRANCE LAMBERT, BELGIUM

MAXILLARY ESTHETIC BRIDGE IN A REGENERATED BONE AREA WITH IMMEDIATE LOADING WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY FRANCE LAMBERT, BELGIUM



EXPERT



France Lambert

Belgium

Prosthodontics : Damian Szajner

Ceramics: Mirko Picone

DETAILS

- Graduated in dentistry in 2002 and also completed a post-graduate program in Periodontology at the University of Liège.
- In 2005, she received an ITI scholarship to expand her education in implantology at the Harvard School of Dental Medicine.
- Currently, she is a Professor and Head of the Department of Periodontology, Oro-dental and Implant Surgery at the University of Liège in Belgium and the co-director of the dental Biomaterials Research Unit.
- She lectures internationally, is the author of more than 70 international publications and acts as a reviewer for international journals in the same field.
- Chair of the Belgium-Luxembourg ITI section and the past-President of the Belgian Society of Periodontology.

MAXILLARY ESTHETIC BRIDGE IN A REGENERATED BONE AREA WITH IMMEDIATE LOADING WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY FRANCE LAMBERT, BELGIUM



DETAILS

Patient Information

Gender	Male
Age	60
Jaw	Maxilla
Health status	ASA 1
Smile line	High
Bone type	Type 3
Local infection	No
Anatomical defects	Yes
Risk factors	No

Initial Situation



Initial situation



Intraoral situation - upper arch



CBCT analysis

Treatment Planning

- The patient's age, medical conditions, and expectations are evaluated.
- GBR procedure, 7 months healing before implant placement.
- Guided surgery.
- Placement of 4 apically tapered implants Straumann® BLC® Ø 4.5mm 12mm SLActive® Roxolid®.
- Immediate loading.

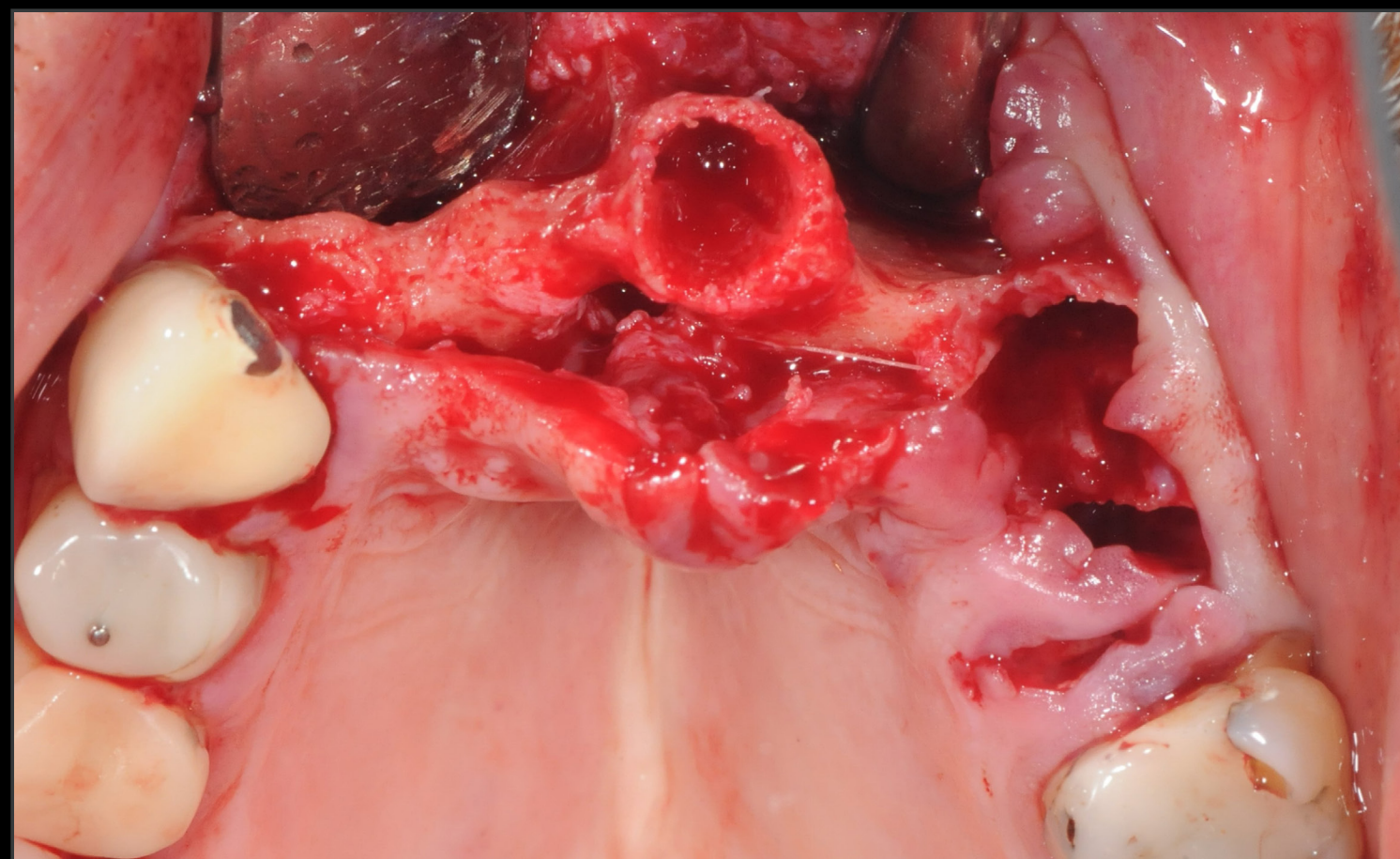
MAXILLARY ESTHETIC BRIDGE IN A REGENERATED BONE AREA WITH IMMEDIATE LOADING WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY FRANCE LAMBERT, BELGIUM



DETAILS

Surgical & Prosthetic Procedures



GBR Procedure



GBR Procedure with Xenograft and Jason® Membrane



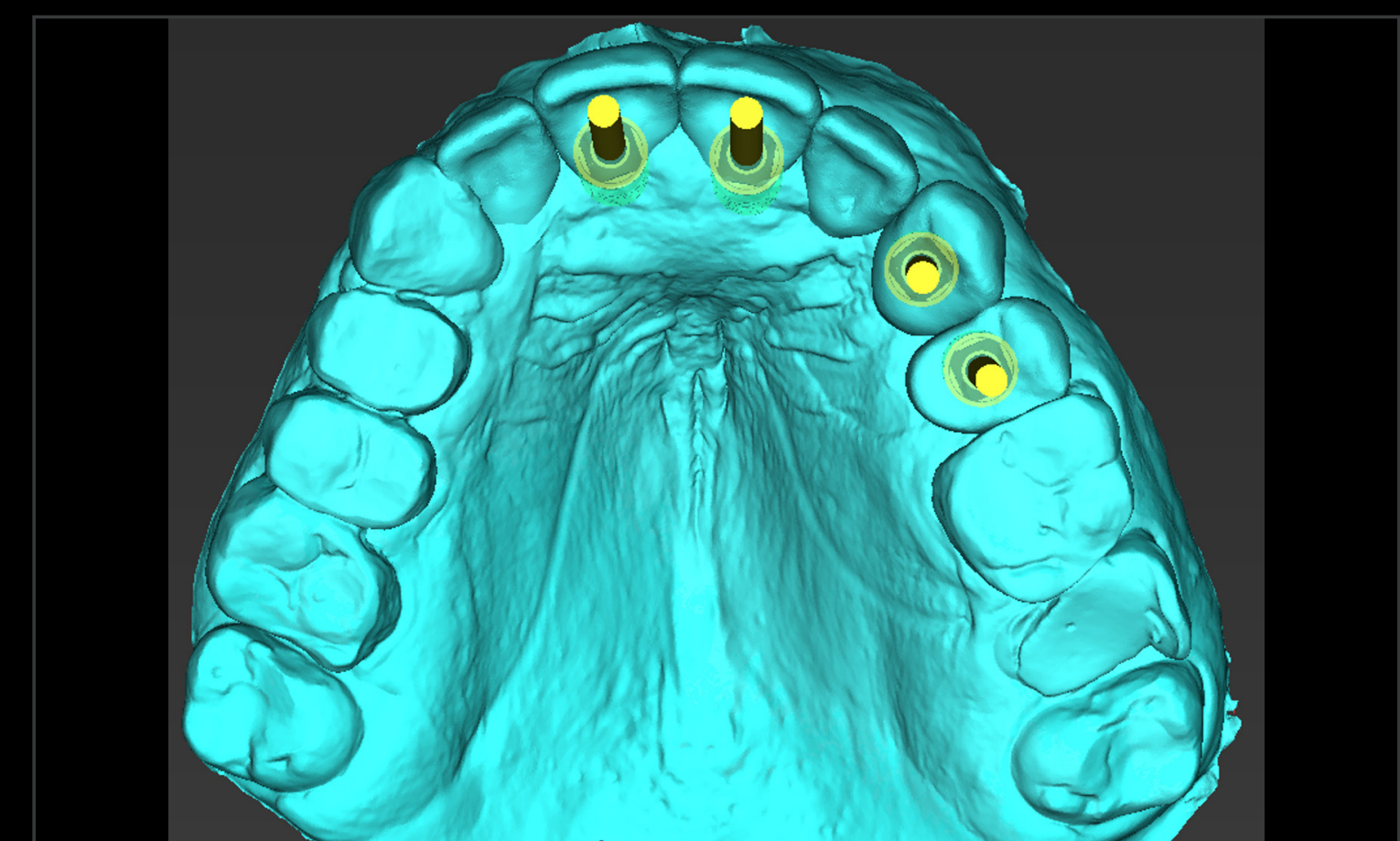
Control 12 days after surgery



Occlusal view 7 months after GBR



CBCT 7 months after GBR



Digital planning

MAXILLARY ESTHETIC BRIDGE IN A REGENERATED BONE AREA WITH IMMEDIATE LOADING WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY FRANCE LAMBERT, BELGIUM



DETAILS

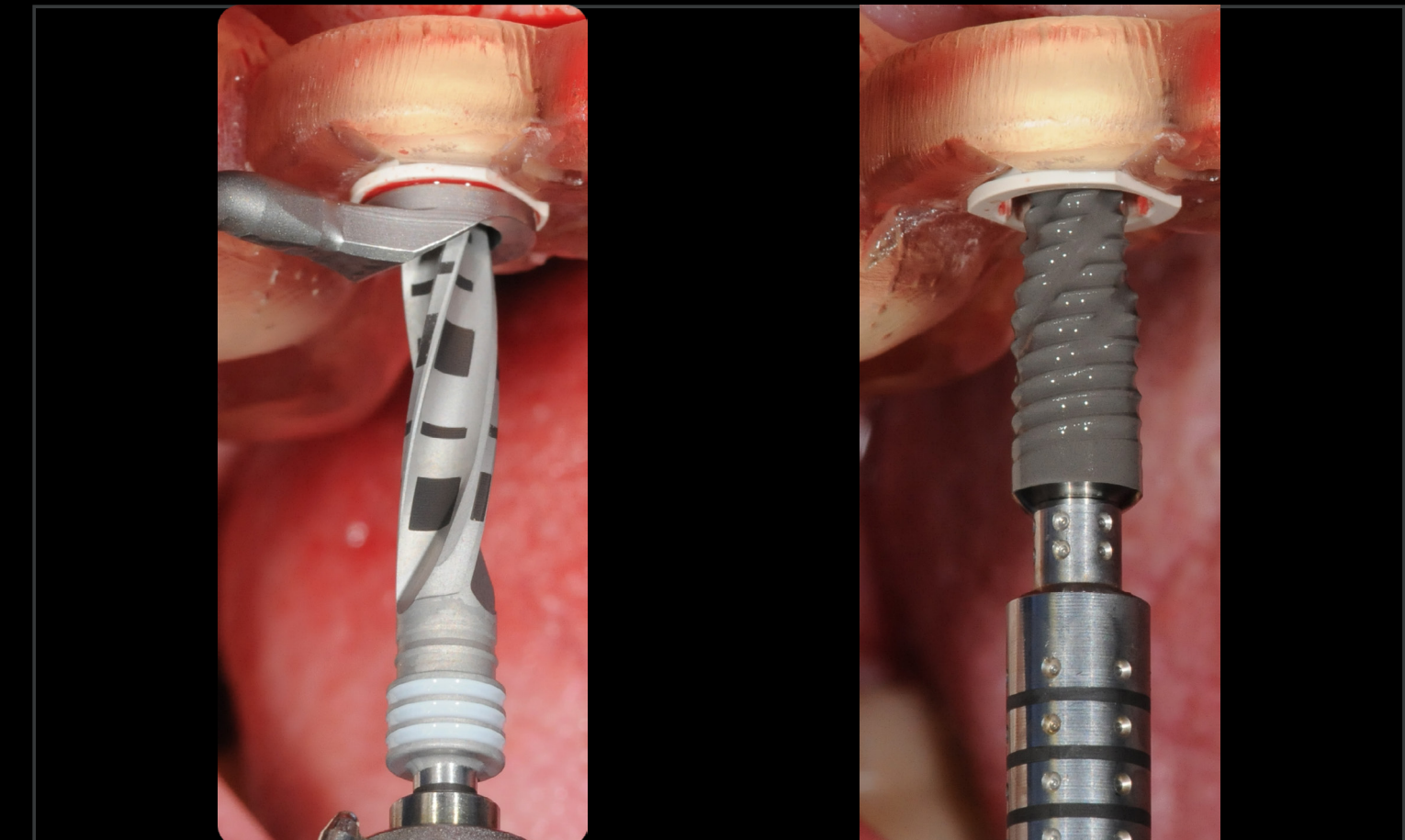
Surgical & Prosthetic Procedures



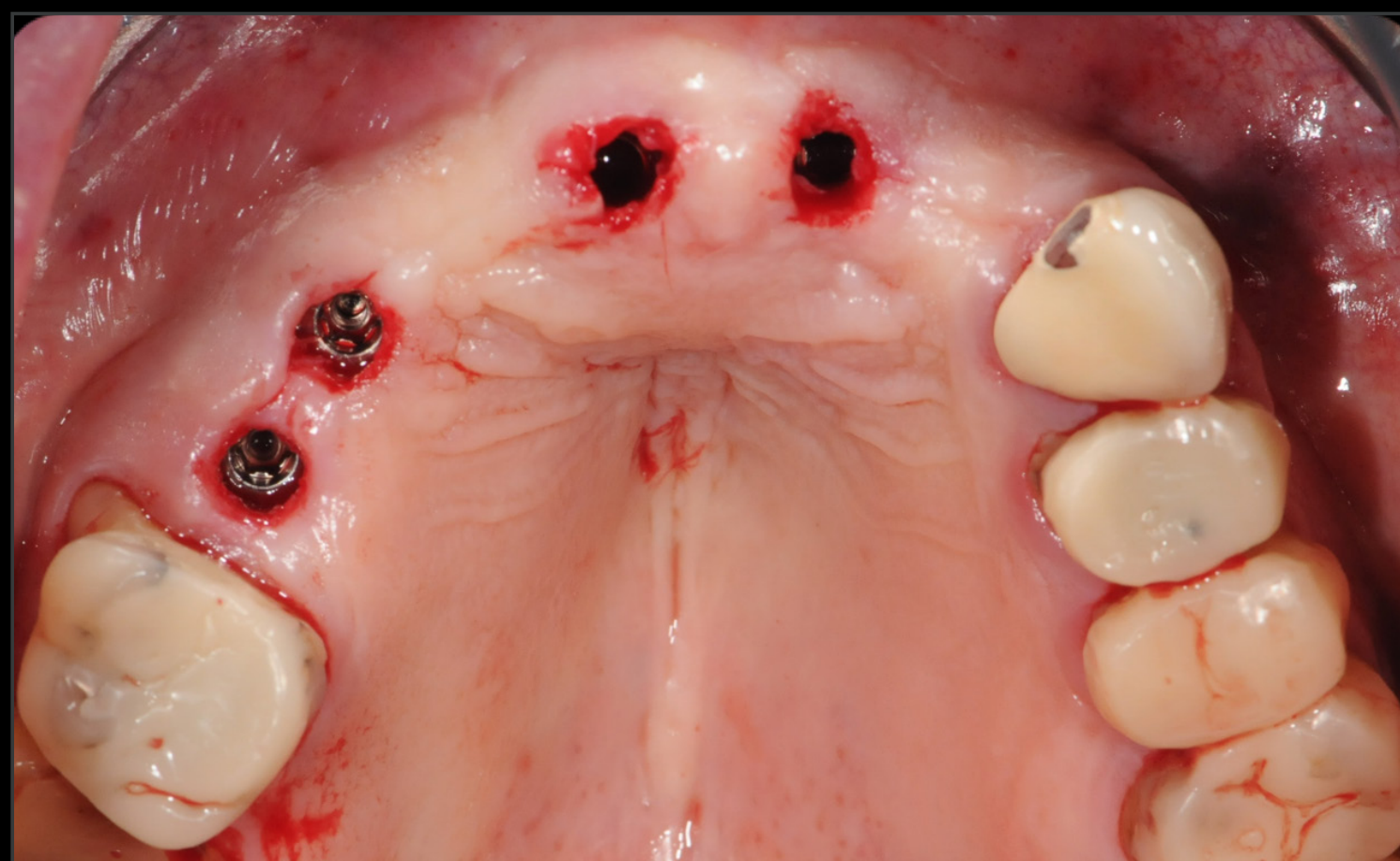
Surgical guide



Surgical guide in position



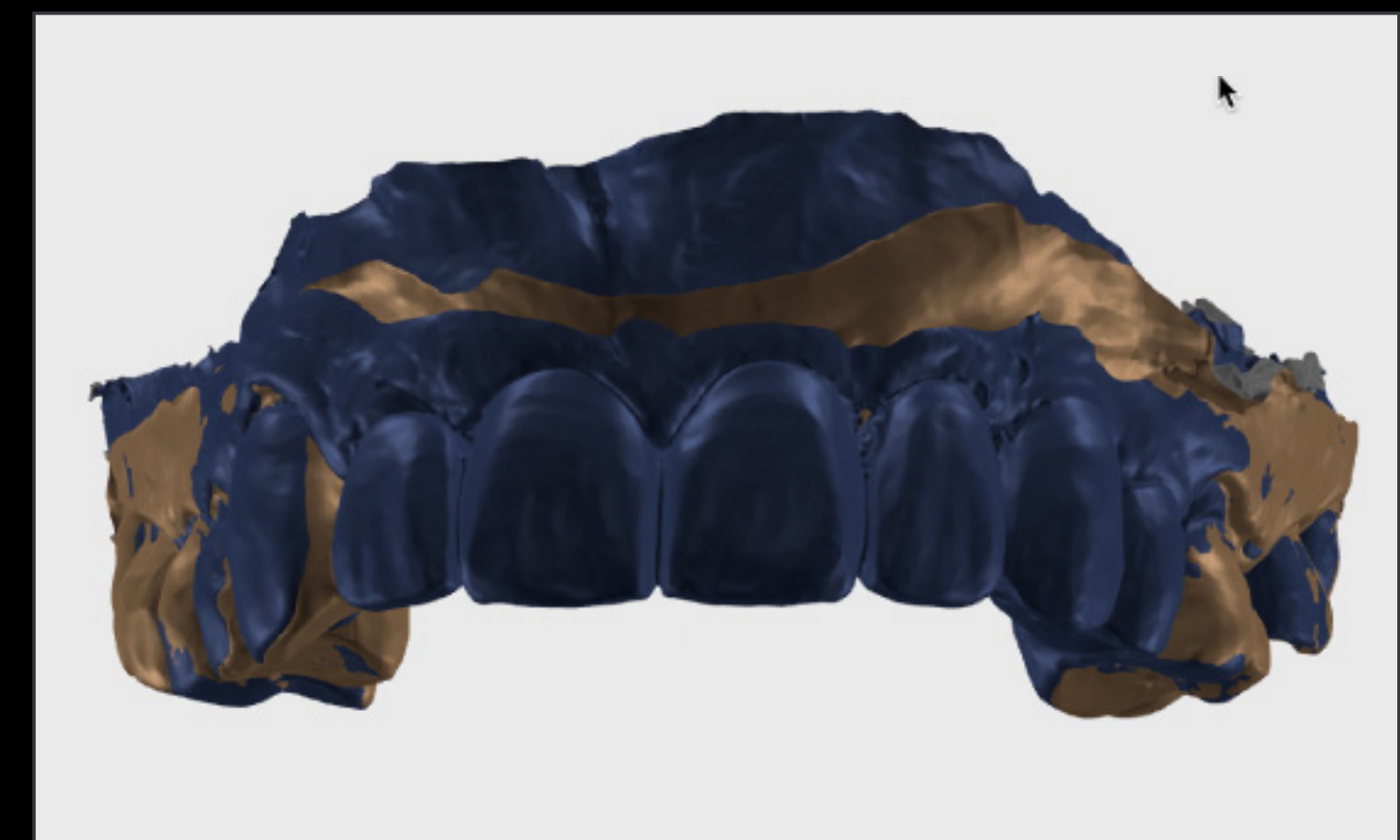
Precise implant positioning through guided surgery



Occlusal view after implant placement



Intra oral scanning



Digital Design

MAXILLARY ESTHETIC BRIDGE IN A REGENERATED BONE AREA WITH IMMEDIATE LOADING WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY FRANCE LAMBERT, BELGIUM



DETAILS

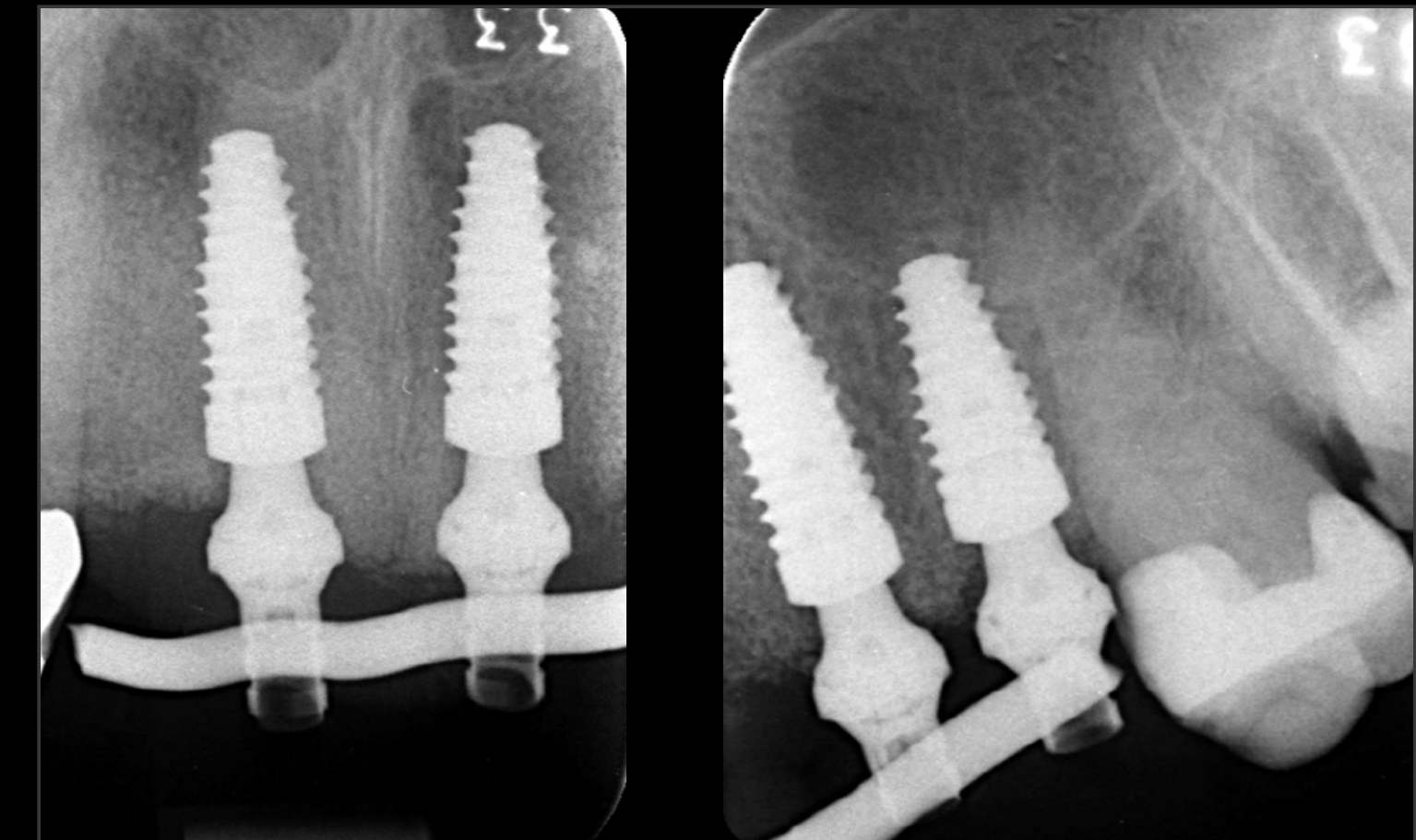
Surgical & Prosthetic Procedures



Provisional restoration



Immediate provisional bridge



Radiographical control



Control after 8 months



Control after 8 months



Final restoration

MAXILLARY ESTHETIC BRIDGE IN A REGENERATED BONE AREA WITH IMMEDIATE LOADING WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY FRANCE LAMBERT, BELGIUM

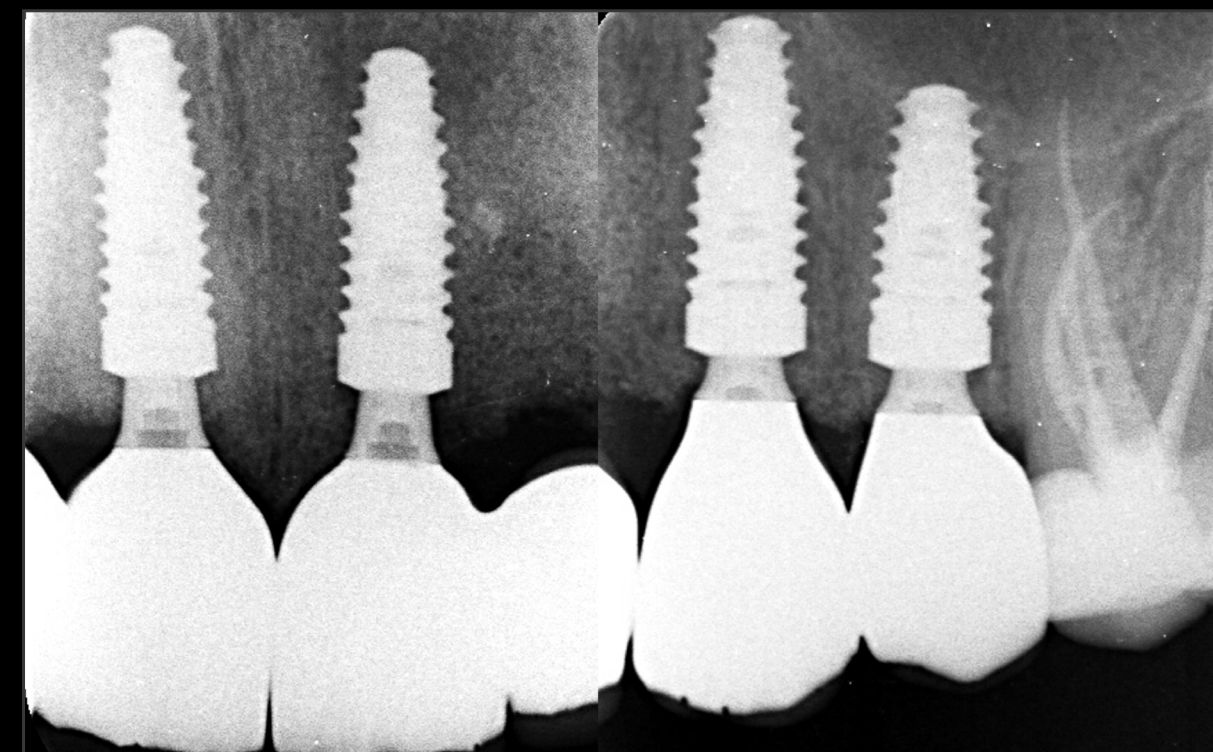


DETAILS

Treatment Outcome



Definitive screw-retained implant bridge



Radiographic control. Final bridge

France Lambert

"These implants are suitable for quite a few indications"
"A versatile implant"

Before



Final restoration



REHABILITATION OF HOPELESS MANDIBULAR INCISORS WITH IMMEDIATE IMPLANT PLACEMENT AND PROVISIONALIZATION USING A DIGITAL WORKFLOW

A CLINICAL CASE REPORT BY JEANETTE CHUA, MALAYSIA

REHABILITATION OF HOPELESS MANDIBULAR INCISORS WITH IMMEDIATE IMPLANT PLACEMENT AND PROVISIONALIZATION USING A DIGITAL WORKFLOW

A CLINICAL CASE REPORT BY JEANETTE CHUA, MALAYSIA



EXPERT



Jeanette Chua

Malaysia

DETAILS

- Graduated in Dentistry from the University of Melbourne, Australia.
- Masters in advanced periodontology at Loma Linda University School of Dentistry (LLUSD) in California, USA.
- Global program development committee for Academy of Osseointegration.
- Vice-president of the Asia Pacific Society of Osseointegration.
- Member of the American Academy of Periodontology and Diplomate of the American Board of Periodontology.
- ITI Fellow and ITI Section Chair, South East Asia.

Feedback from the Clinician

“Immediate implants and immediate provisionalization has become the norm, especially for the anterior teeth. However, the pre-surgical wax-up preparation, surgical guide, and provisional preparation can be time-consuming and arduous if you do not have an in-house technician. Digital workflow has changed the way we practice immediacy nowadays and this case will demonstrate the time saved in clinical practice and improved patient comfort when we digitize. Secondly, the digital scanning of impression taking creates less trauma on the surgical site, thus improving the patient’s experience. Thirdly, 3D printing cuts down cost and time needed for provisional fabrication and allows a much more accurate fitting”.

REHABILITATION OF HOPELESS MANDIBULAR INCISORS WITH IMMEDIATE IMPLANT PLACEMENT AND PROVISIONALIZATION USING A DIGITAL WORKFLOW



A CLINICAL CASE REPORT BY JEANETTE CHUA, MALAYSIA

DETAILS

Patient’s Chief Complaint

“I cannot bite with my lower front teeth anymore without hurting. I would like to find a more permanent solution. Not being able to chew has affected my lifestyle tremendously”.

Patient Information

Age	58
Jaw	Mandible
Health status	Good
Small line	Average
Bone type	Type 2
Local infection	Yes
Anatomical defects	Yes
Risk factors	Advanced periodontitis (stage IV) Former smoker for 40 years

Initial Situation



Mandibular incisors with high mobility, and poor prognosis



Radiographical evaluation shows severe bone loss on anterior mandible

Treatment Planning

- Extraction of hopeless incisors #32 – #42.
- Straumann® BLX Ø 3.5mm SLActive® 10mm implant placement at sites #42 and #31.
- Fill the gaps, bone defects, and adjacent sockets with Straumann® Xenograft.
- Primary stability is paramount for immediate provisionalization.
- Delivery of screw-retained 4-unit temporary bridge.
- Monitoring during the osseointegration period.
- Finalization with Zr Oxide and Li Disilicate 4-unit screw-retained bridge.

REHABILITATION OF HOPELESS MANDIBULAR INCISORS WITH IMMEDIATE IMPLANT PLACEMENT AND PROVISIONALIZATION USING A DIGITAL WORKFLOW

A CLINICAL CASE REPORT BY JEANETTE CHUA, MALAYSIA

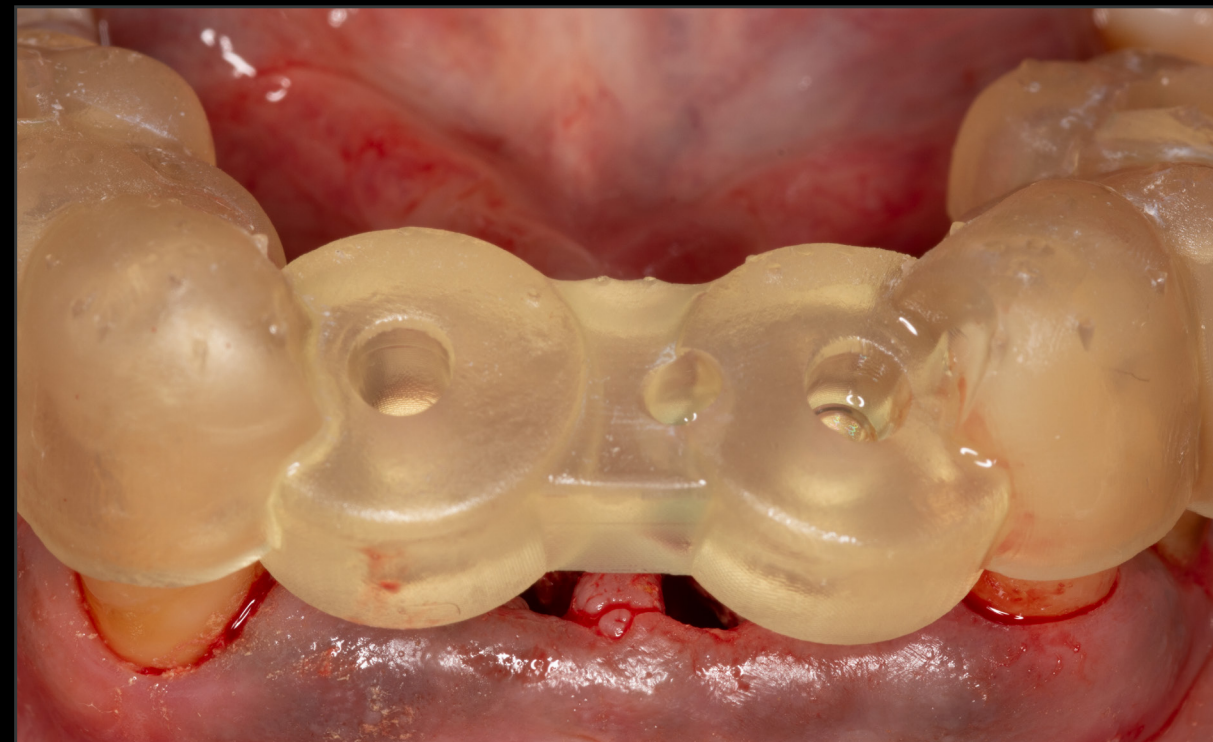


DETAILS

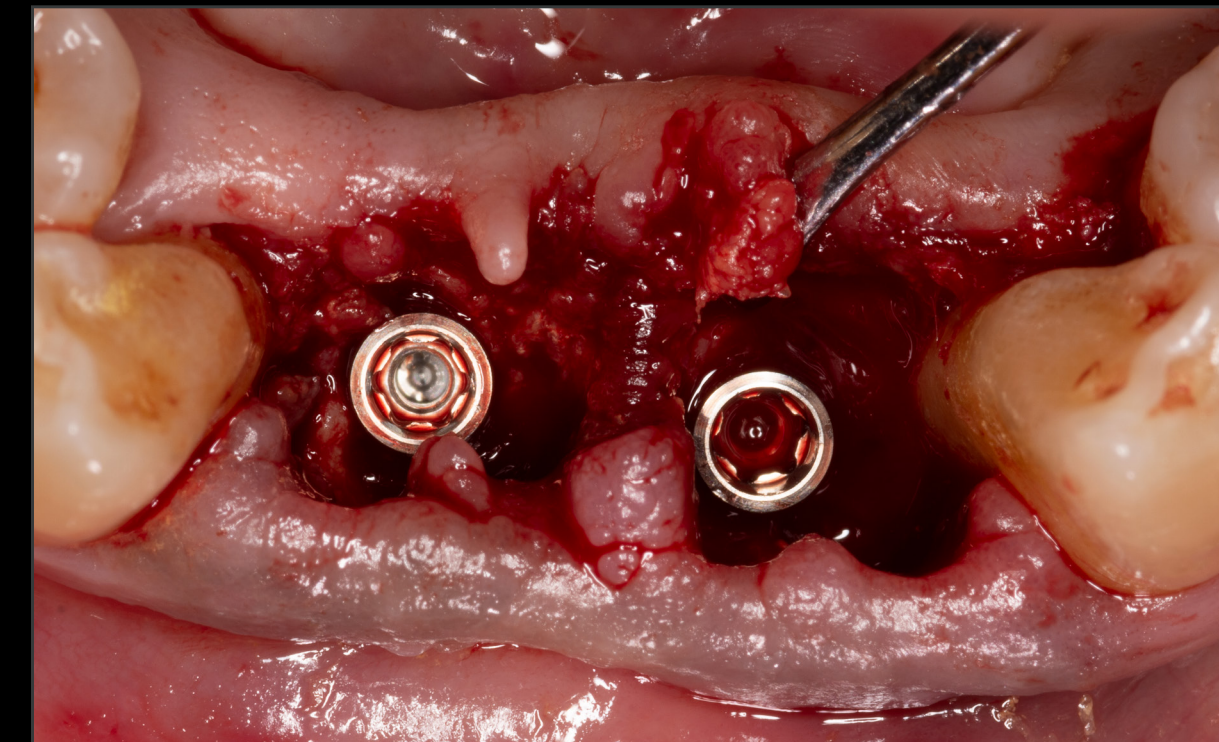
Surgical & Prosthetic Procedures



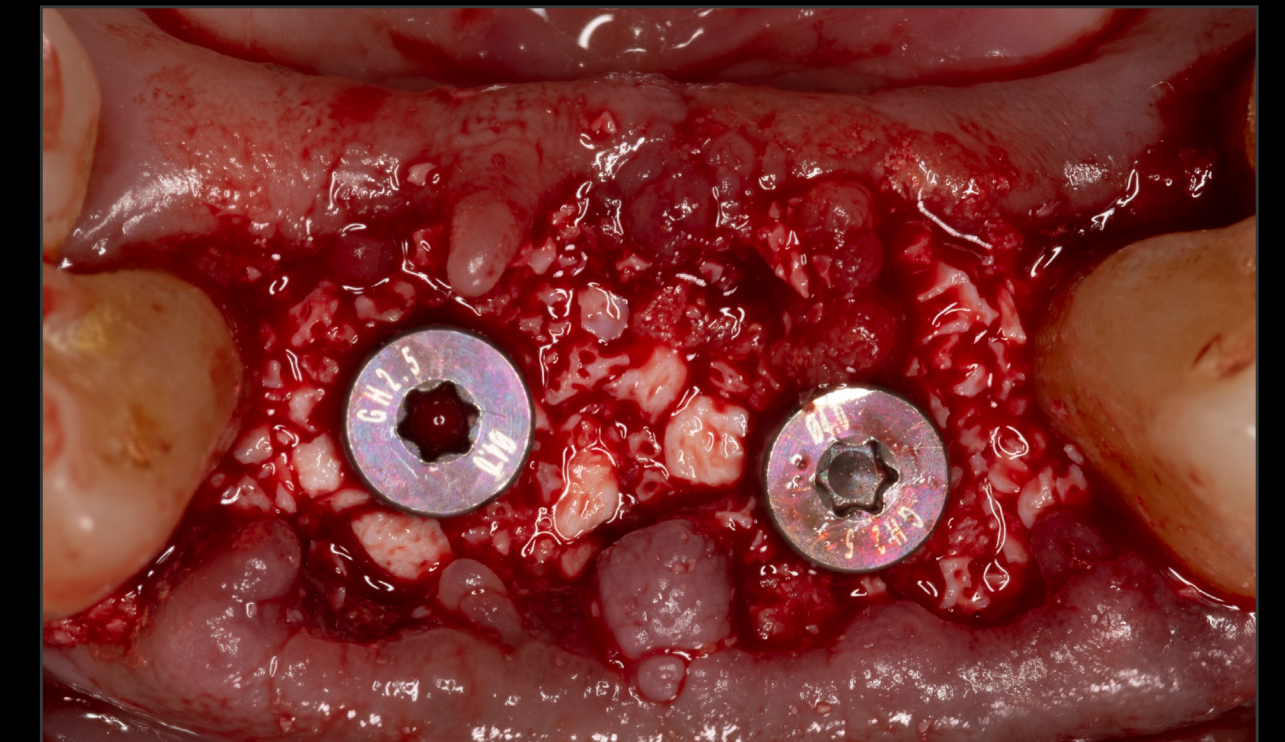
Surgical guide planning after matching the CBCT scan with the intraoral scan



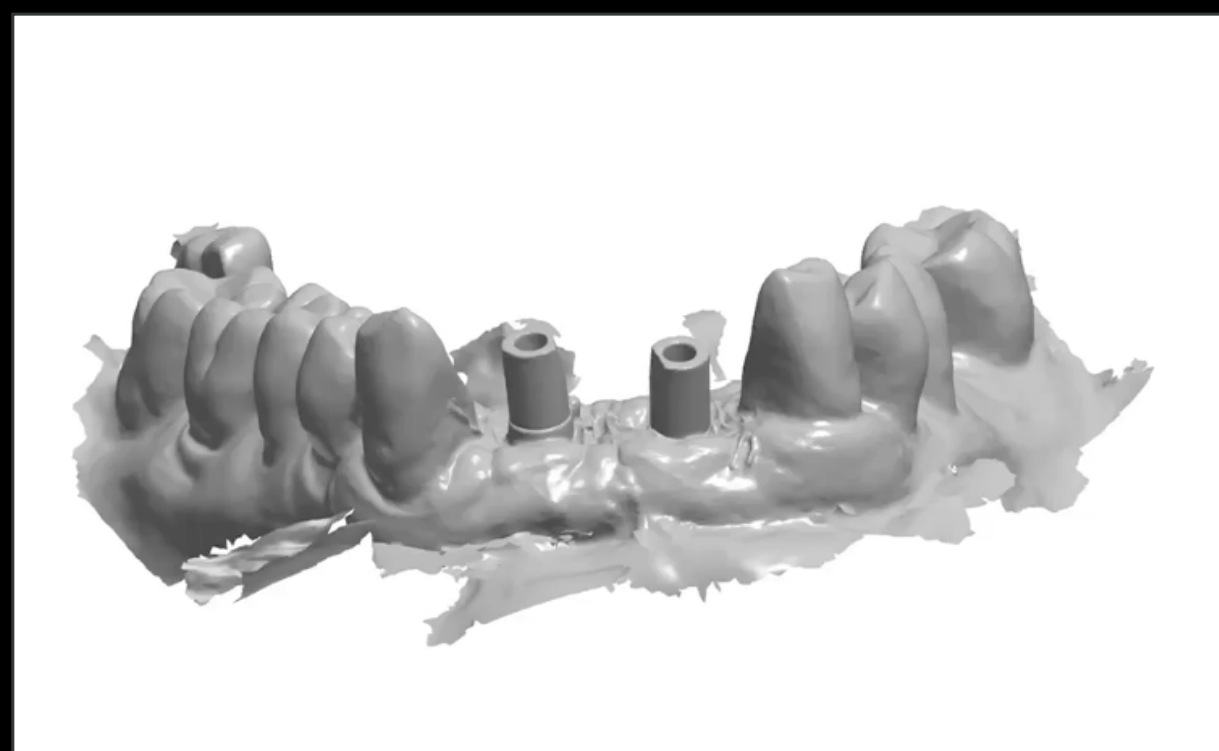
Surgical guide in position for initial drill positioning



Straumann® BLX Implants inserted in positions #31 and #42



Straumann® Xenograft placed to fill up the gaps both buccal and lingually



The insertion area for the scanbodies was re-scanned, sent off to the technician to design and print the temporary bridge



After 1 hour, the temporary bridge was inserted with minimal adjustment. Digital planning allowed occlusion to be checked and an adequate emergence profile



Periapical radiograph after surgery and temporary delivery



Follow-up at 3 months after surgery

REHABILITATION OF HOPELESS MANDIBULAR INCISORS WITH IMMEDIATE IMPLANT PLACEMENT AND PROVISIONALIZATION USING A DIGITAL WORKFLOW

A CLINICAL CASE REPORT BY JEANETTE CHUA, MALAYSIA



DETAILS

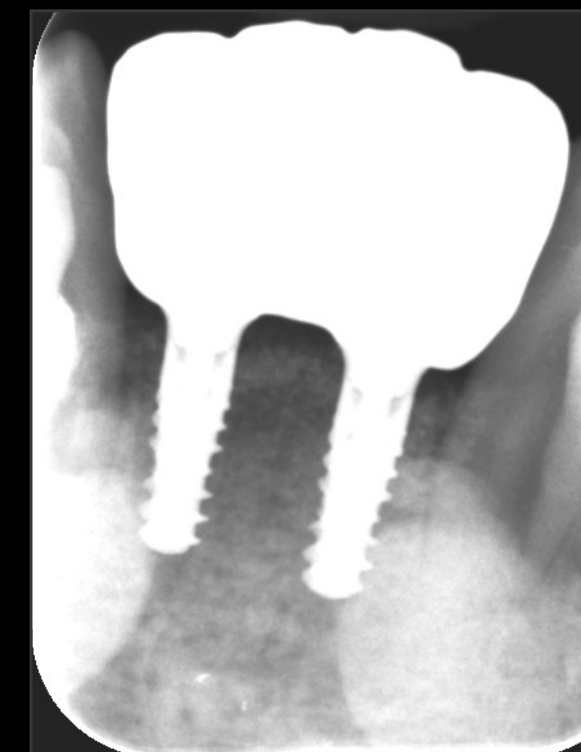
Treatment Outcome



Delivery of screw-retained bridge.



Lingual view of the final prosthesis.



Radiographic control of the final prosthesis

Patient's Experience

"It has been so long since I was able to bite an apple with my front teeth, and the extra benefit is that all my friends say I look so much younger. The best part of this is that I never felt any pain throughout the whole process and have never felt like I have lost my teeth".

Before



After 2.5 years



STRAUMANN® iEXCEL

CASES MULTIPLE-UNIT POSTERIOR ZONE

iEXCEL 

STRAUMANN®
PERFORMANCE
SYSTEM

CASES MULTIPLE-UNIT POSTERIOR ZONE



- Immediate bridge in posterior maxilla with Smile in a Box® with Straumann® BLC implant
 - ▶ Alfonso Caiazza, Italy
- Three-unit bridge in posterior area with Straumann® BLX implants and immediate prosthesis
 - ▶ Sergio Piano, Italy

IMMEDIATE BRIDGE IN POSTERIOR MAXILLA WITH SMILE IN A BOX[®] WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY ALFONSO CAIAZZO, ITALY

IMMEDIATE BRIDGE IN POSTERIOR MAXILLA WITH SMILE IN A BOX® WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY ALFONSO CAIAZZO, ITALY



EXPERT



Alfonso Caiazzo

Italy

DETAILS

- He received his dental degree at the University of Naples, Italy, in 1991. He went through a residency program in Oral and Maxillofacial surgery at TUFTS University in Boston, USA from 1993-1997. He was clinical instructor at the same University in the department of oral surgery in 1998. From 1997 to 1999 he did a fellowship in Implant dentistry at the New York University, New York USA.
- Clinical Assistant Professor of Oral & Maxillofacial Surgery in the Henry M. Goldman School of Dental Medicine (Boston University).
- President Elect of the Italian society of oral surgery and implant dentistry (SICOI) 2015-2016.
- Founding member of the IAO (Italian Academy of Osteointegration).
- Vice President IAO (Italian Academy of Osteointegration) 2017-2018.
- President IAO (Italian Academy of Osteointegration) 2019-2020.
- Certified in Wilckodontics.
- He is Fellow of the European Federation of Oral Surgery Societies (EFOSS).
- Co-editor of the book Orthodontically Driven Corticotomy, Wiley-Blackwell 2015.
- Co-author of the chapter Implant dentistry in Oral Surgery for the General Dentist, Wiley-Blackwell 2015.
- Author of several articles in International Journals.
- His office is located in Salerno, Italy, and his practice is limited to oral surgery and Implant dentistry.

IMMEDIATE BRIDGE IN POSTERIOR MAXILLA WITH SMILE IN A BOX® WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY ALFONSO CAIAZZO, ITALY



DETAILS

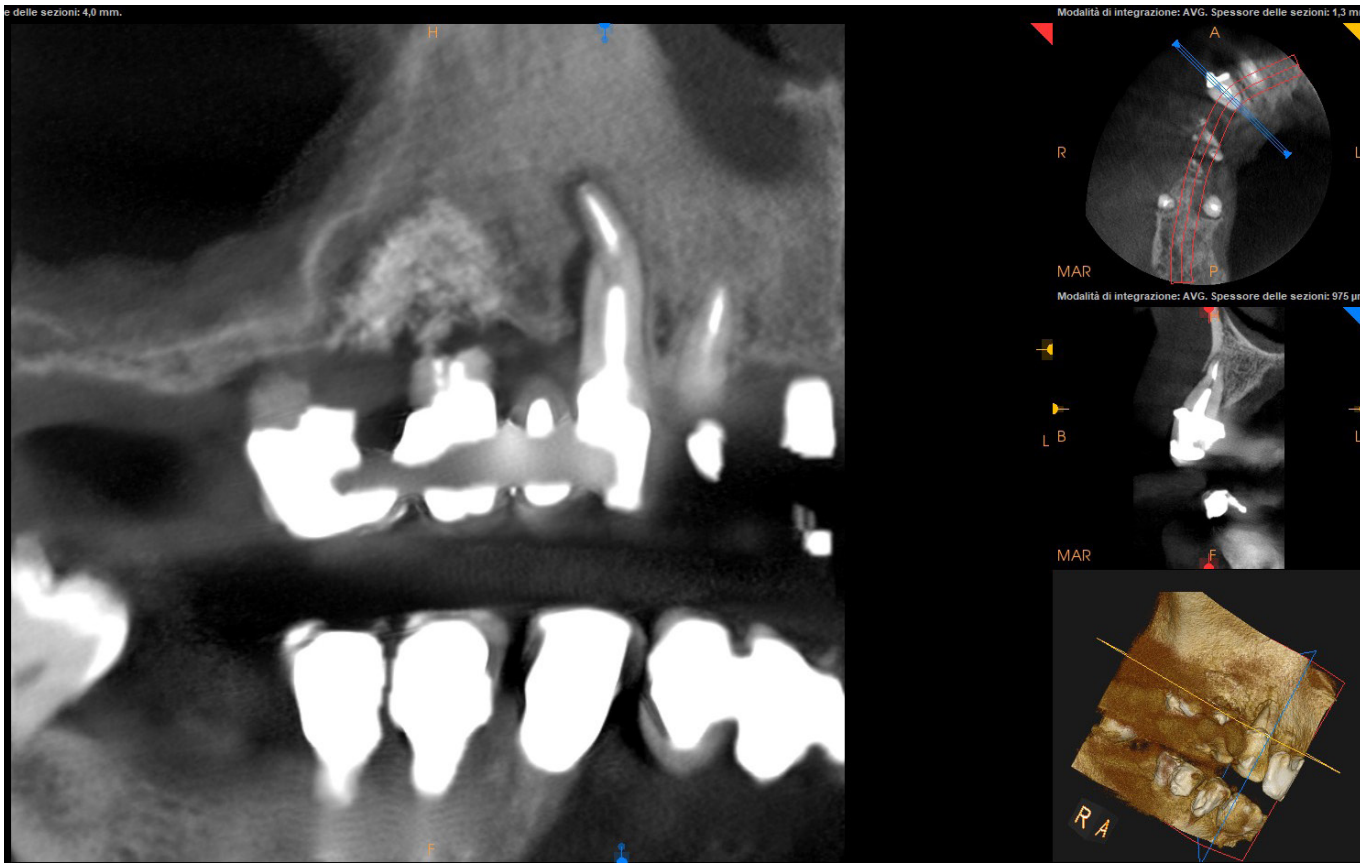
Patient Information

Gender	M
Age	72
Jaw	Maxilla
Health status	ASA I
Bone type	Type III
Local infection	No
Anatomical defects	Yes
Risk factors	None

Initial Situation



Intraoral initial situation of right upper quadrant



CBCT shows initial condition in posterior right maxilla

Treatment Planning

- An angled distal implant was planned due to pneumatized maxillary sinus.
- Extraction of hopeless teeth.
- Immediate implant placement with guided surgery using Straumann® Smile in a Box®.
- Placement of 2 apically tapered implant Straumann® BLC®
Ø4.5mm x 10mm SLActive® Roxolid®.
- Immediate provisional restoration.
- New provisional restoration including tooth #13, 2 months after surgery.

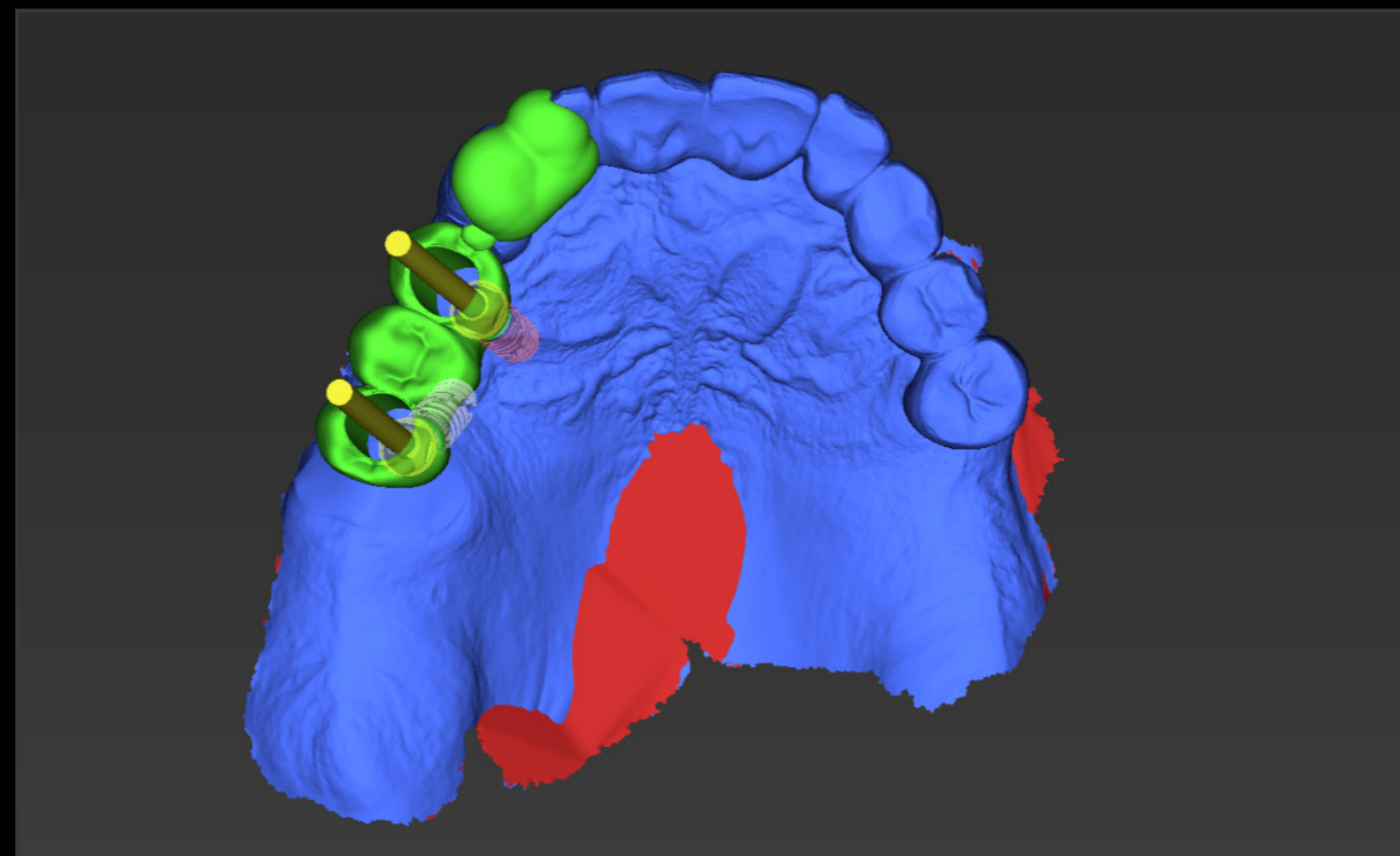
IMMEDIATE BRIDGE IN POSTERIOR MAXILLA WITH SMILE IN A BOX[®] WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY ALFONSO CAIAZZO, ITALY

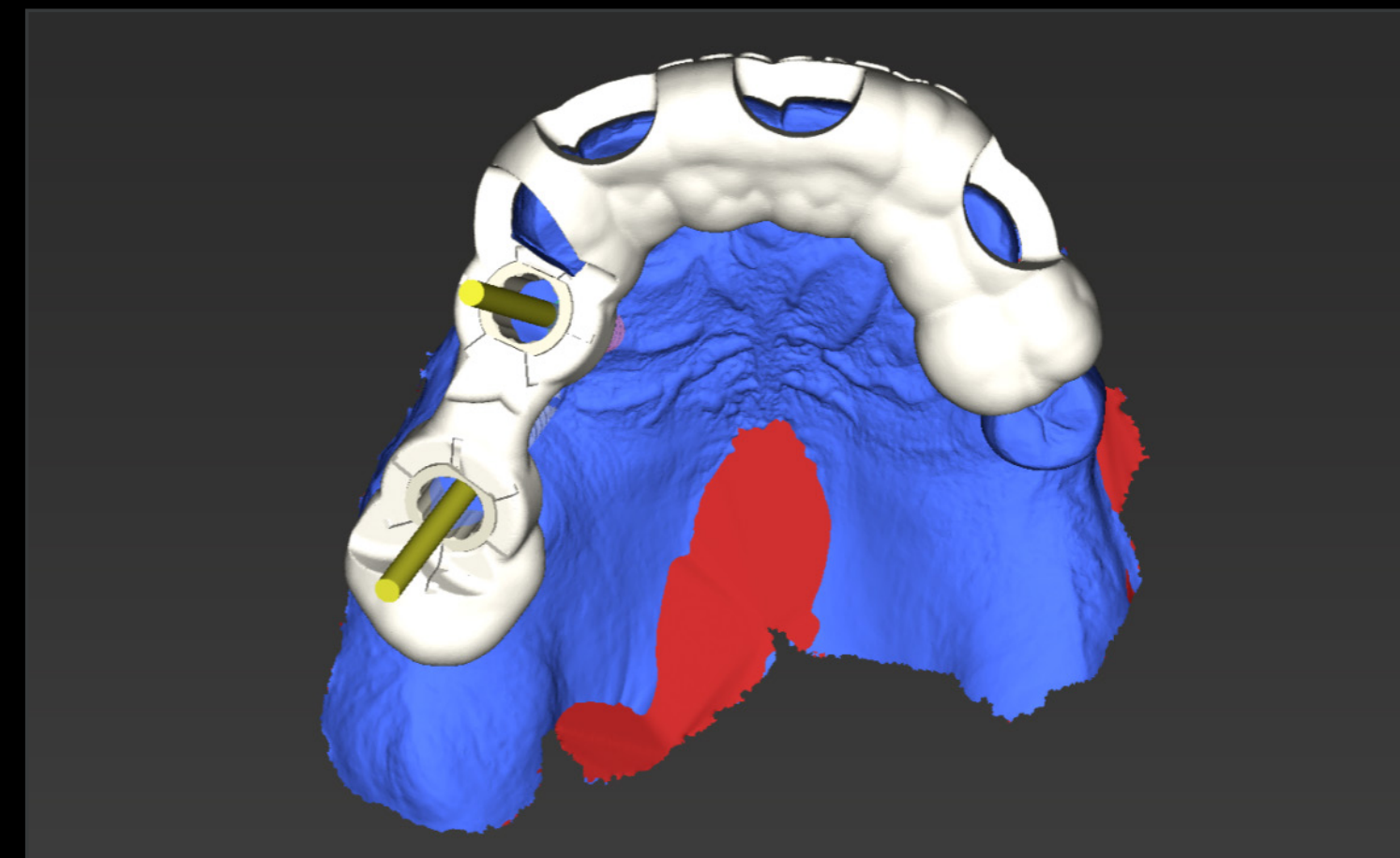


DETAILS

Surgical & Prosthetic Procedures



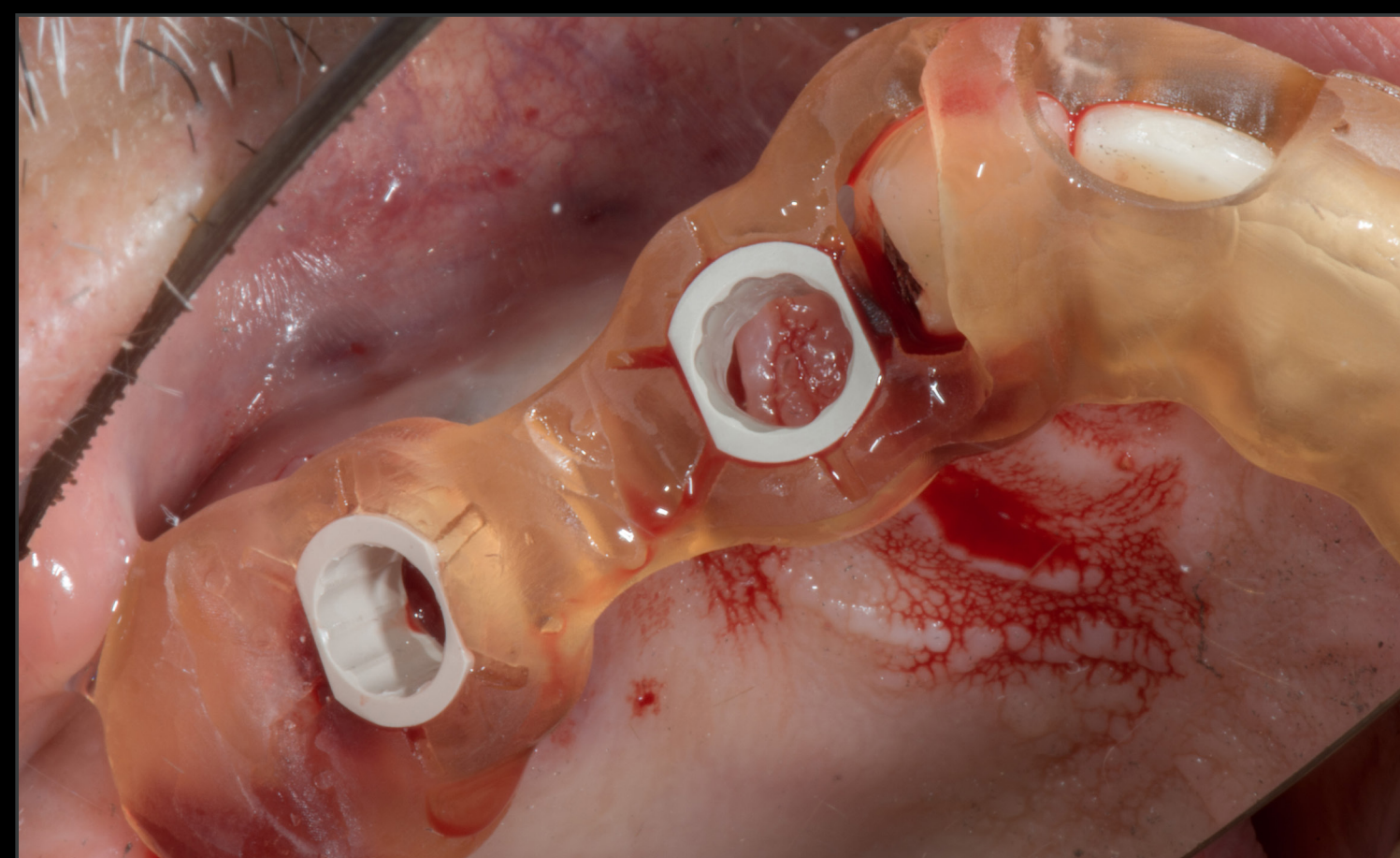
Digital prosthetic-driven implant planning



Surgical guide design



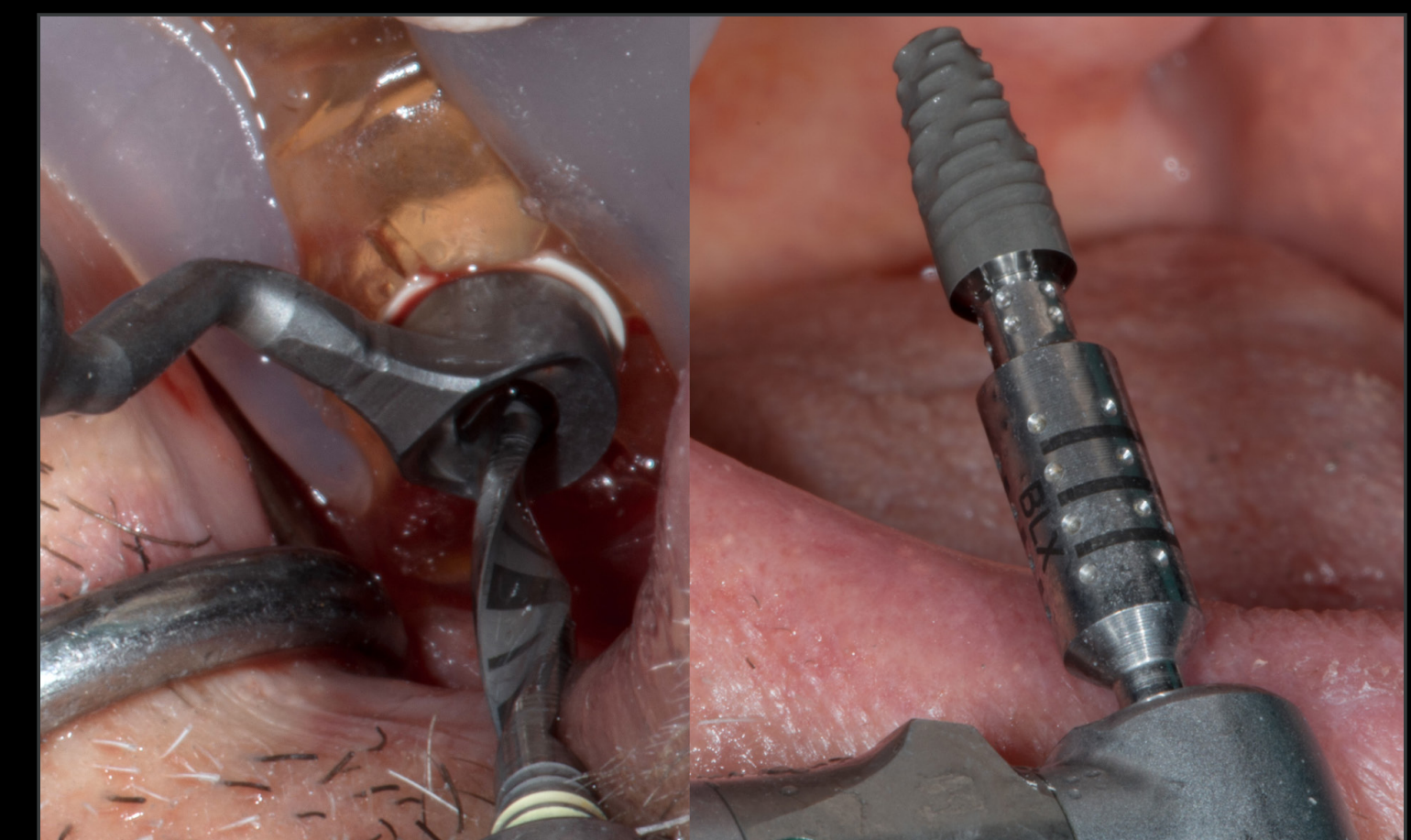
Bridge removal and teeth extraction



Surgical guide in correct position



Flap elevation



Guided drilling and implant placement

IMMEDIATE BRIDGE IN POSTERIOR MAXILLA WITH SMILE IN A BOX® WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY ALFONSO CAIAZZO, ITALY



DETAILS

Surgical & Prosthetic Procedures



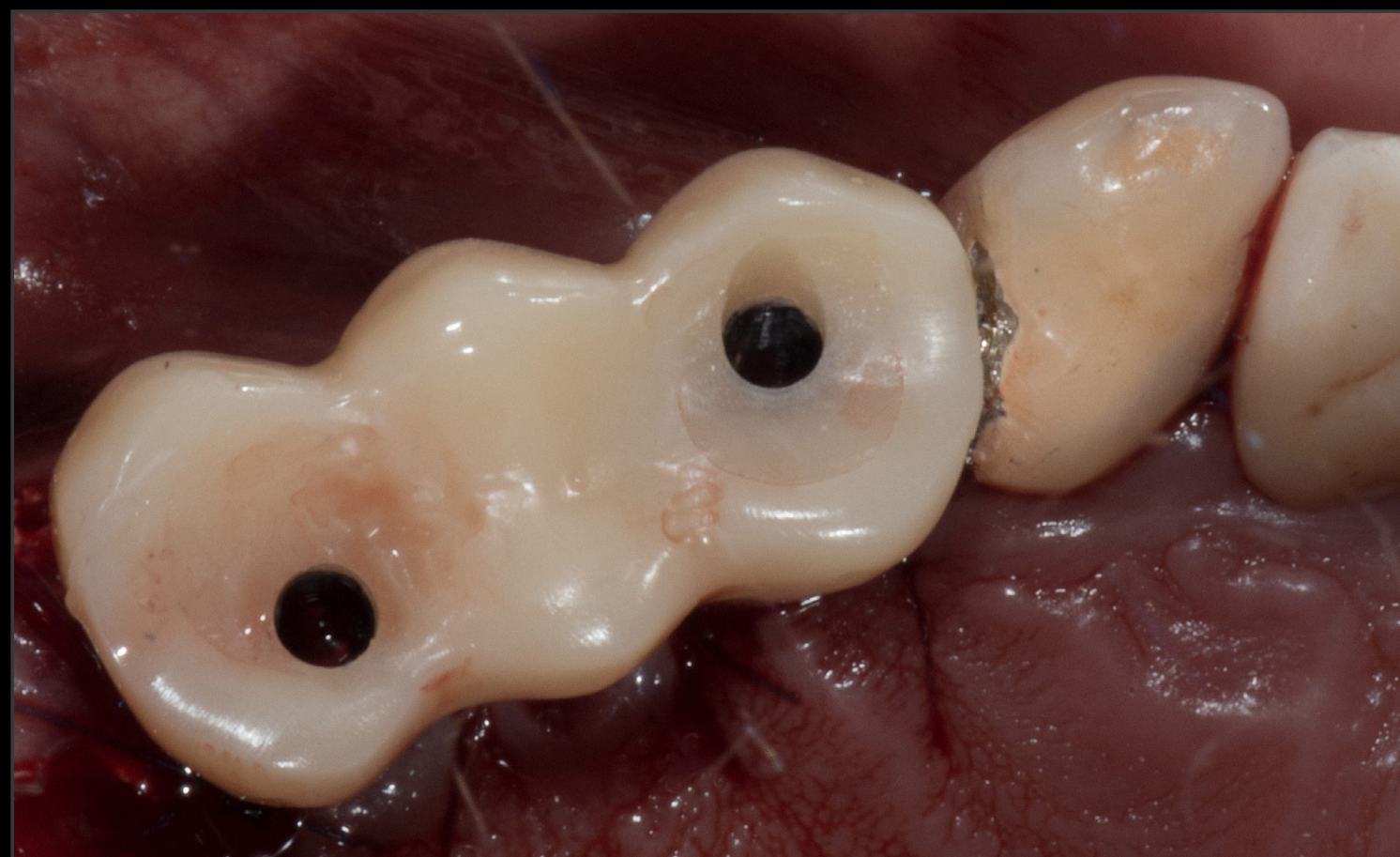
Implants in final position



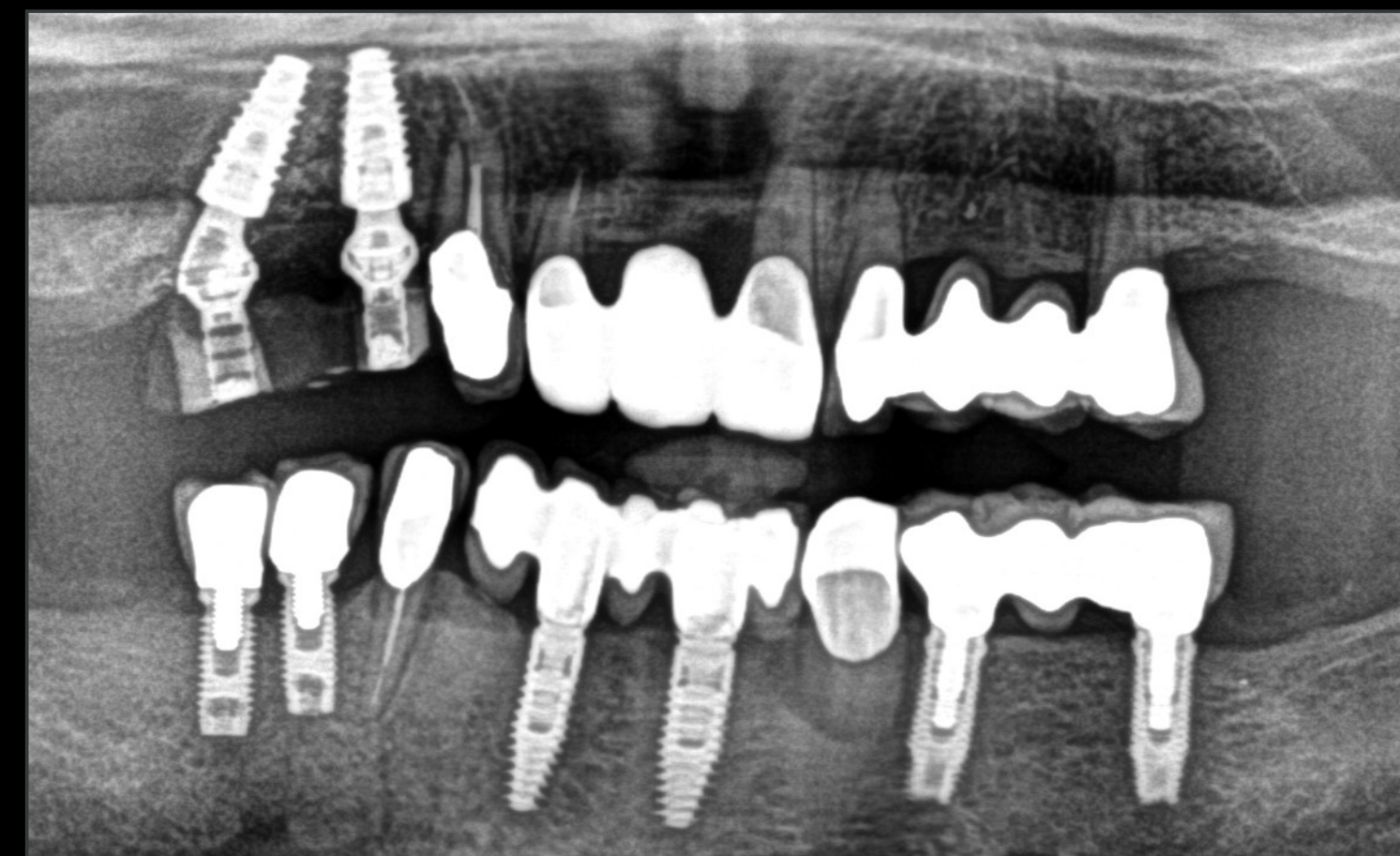
Immediate provisional from Straumann®
Smile in a Box®



Bridge provisional ready



Screw-retained provisional bridge



Radiographic control



Occlusal adjusts during provisional period

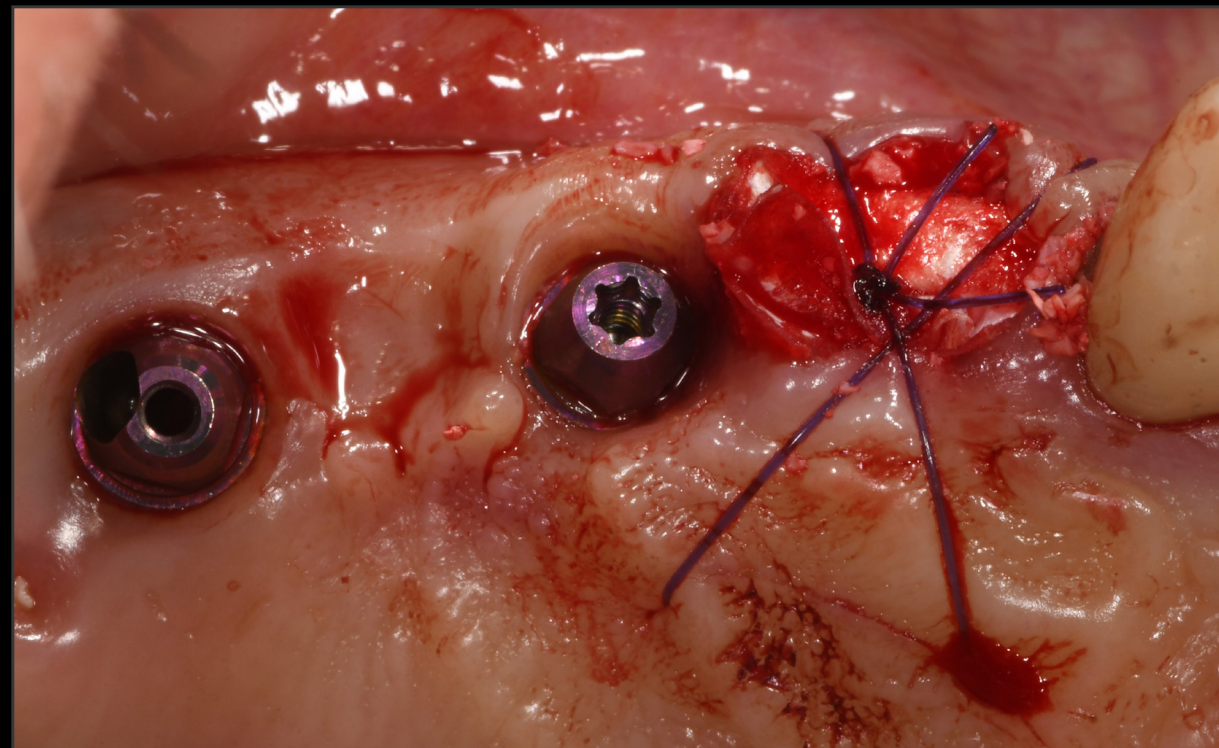
IMMEDIATE BRIDGE IN POSTERIOR MAXILLA WITH SMILE IN A BOX® WITH STRAUMANN BLC



A CLINICAL CASE REPORT BY ALFONSO CAIAZZO, ITALY

DETAILS

Treatment Outcome



Tooth 13 extracted



New provisional including tooth #13

Alfonso Caiazzo

“BLC even if less aggressive in terms of threads design can be safely used for immediacy without the need of having the lab changing the routine or tools to make the prosthesis. In native or healed bone the performance of the BLC is highly comparable to the BLX”

Before



Final restoration



THREE-UNIT BRIDGE IN POSTERIOR AREA WITH STRAUMANN® BLX IMPLANTS AND IMMEDIATE PROSTHESIS

A CLINICAL CASE REPORT BY SERGIO PIANO, ITALY

THREE-UNIT BRIDGE IN POSTERIOR AREA WITH STRAUMANN® BLX IMPLANTS AND IMMEDIATE PROSTHESIS

A CLINICAL CASE REPORT BY SERGIO PIANO, ITALY



EXPERT



Sergio Piano
Italy

DETAILS

- Graduated in Dental Medicine (Cum Laude) from the University of Genova, Italy.
- Teacher at the Postgraduate Program at Federico II Naples University, Italy (Master in Implantology), Padua University (Master's in Digital Implantology) and Brescia University, Italy (Master in Digital Dentistry).
- Active member of IAO (Italian Academy of Osseointegration) and IAED (Italian Academy of Esthetic Dentistry). Affiliate member of EAED (European Academy of Esthetic Dentistry).
- ITI fellow and ITI Educational Delegate of Italian Section.

Feedback from the Clinician

"In the challenging times we are facing, it is essential that we offer efficient solutions that give our patients confidence and an excellent experience in our practice. When indicated, immediate implant placement into fresh extraction sockets can reduce the treatment time and cost, maintain the gingival tissues and increase the comfort of our patients."

"It is not only important to apply a careful decision-making process to define our clinical approach and workflow, but also to select the proper quality and design of materials for our treatments."

Acknowledgment: A special thanks to Dr. Elisa Oneto for the final prosthetic part and to Alessandro Giacometti for his contribution to the complete lab workflow.

THREE-UNIT BRIDGE IN POSTERIOR AREA WITH STRAUMANN® BLX IMPLANTS AND IMMEDIATE PROSTHESIS

A CLINICAL CASE REPORT BY SERGIO PIANO, ITALY



DETAILS

Patient’s Chief Complaint

“I would like to chew better on the left side of the mouth, to attain a more esthetic smile, to avoid any type of removable restoration at any point in the treatment and to be treated with a minimally invasive procedure because I have had a bad experience during previous treatments.”

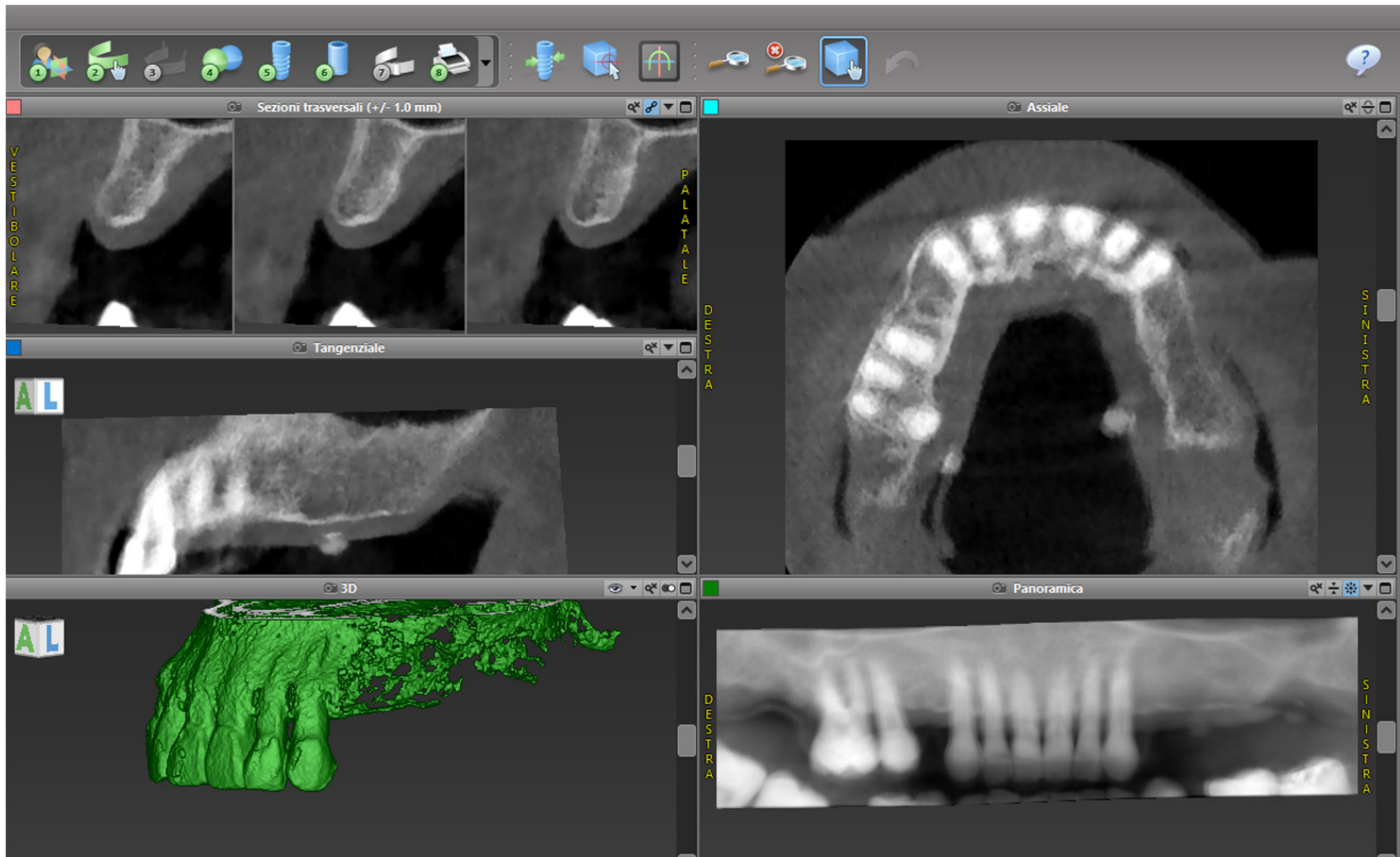
Patient Information

Age	58
Jaw	Maxilla
Health status	Good
Smile line	High
Bone type	Type 2
Local infection	No
Anatomical defects	Yes
Risk factors	Immediate temporary bridge

Initial Situation



Left lateral view of the patient’s maxilla.



CBCT examination with CoDiagnostiX® shows adequate volume for implant placement.

Treatment Planning

- Diagnostic guide preparation and CBCT exam with the diagnostic guide in position.
- Cast model and diagnostic guide scanning; creation of the corresponding STL files and the STL file related to the digital wax-up of the missing teeth.
- Processing of Dicom (CBCT exam) and STL (upper model, upper model with guide and digital wax-up) data in coDiagnostiX® planning software to carefully plan the implant placement.
- Production of the printed surgical guide and resin models via coDiagnostiX® plan.
- Flapless implant placement on position #24 and #26, provisional bridge delivery.
- Final rehabilitation with a screw-retained implant bridge.

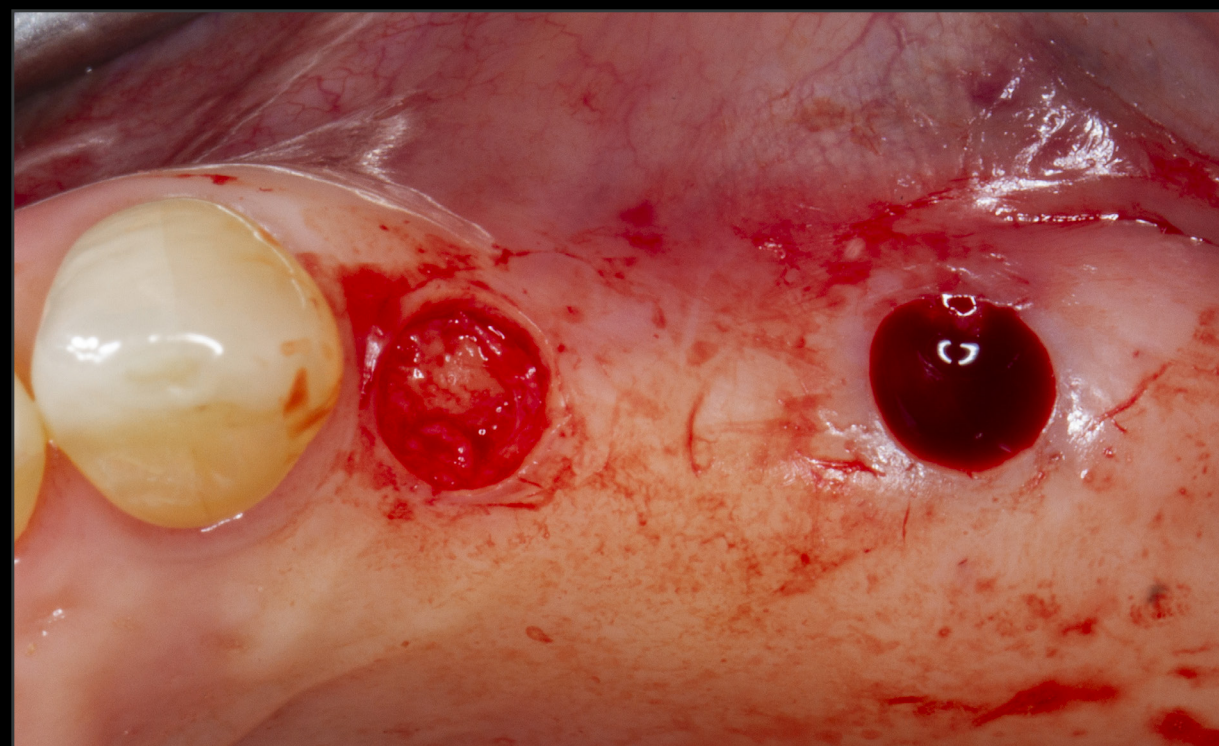
THREE-UNIT BRIDGE IN POSTERIOR AREA WITH STRAUMANN® BLX IMPLANTS AND IMMEDIATE PROSTHESIS

A CLINICAL CASE REPORT BY SERGIO PIANO, ITALY

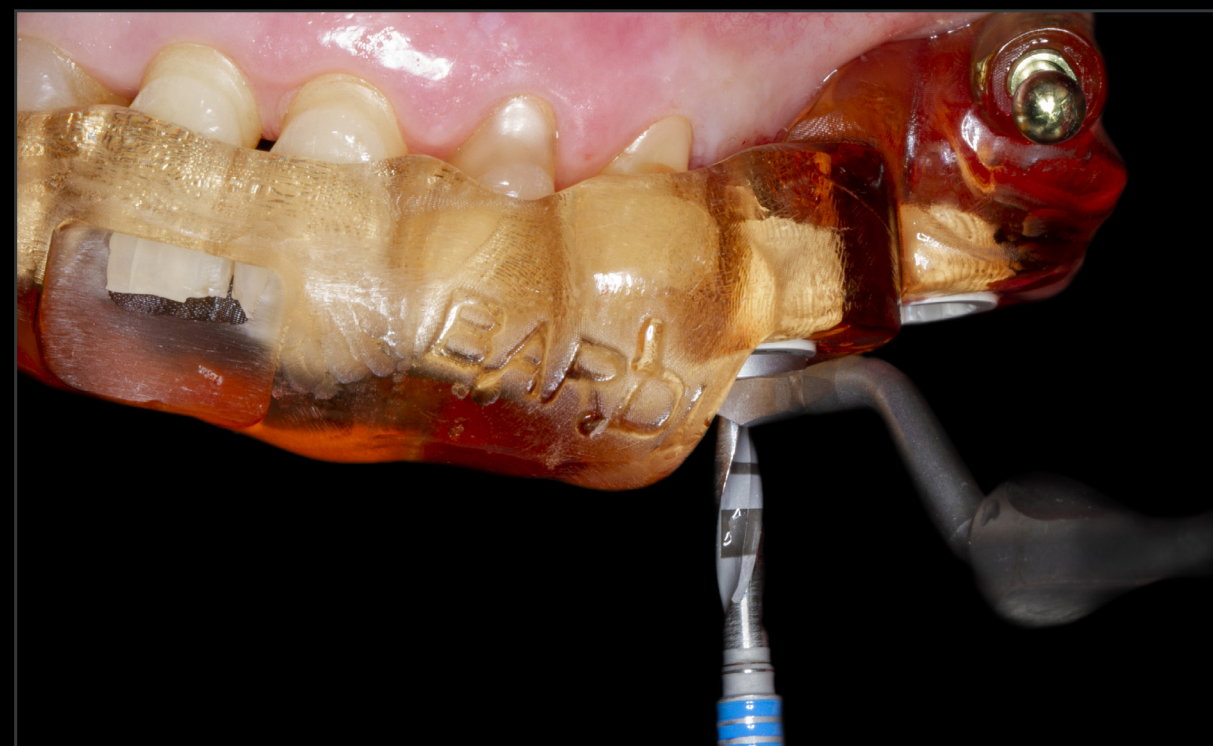


DETAILS

Surgical & Prosthetic Procedures



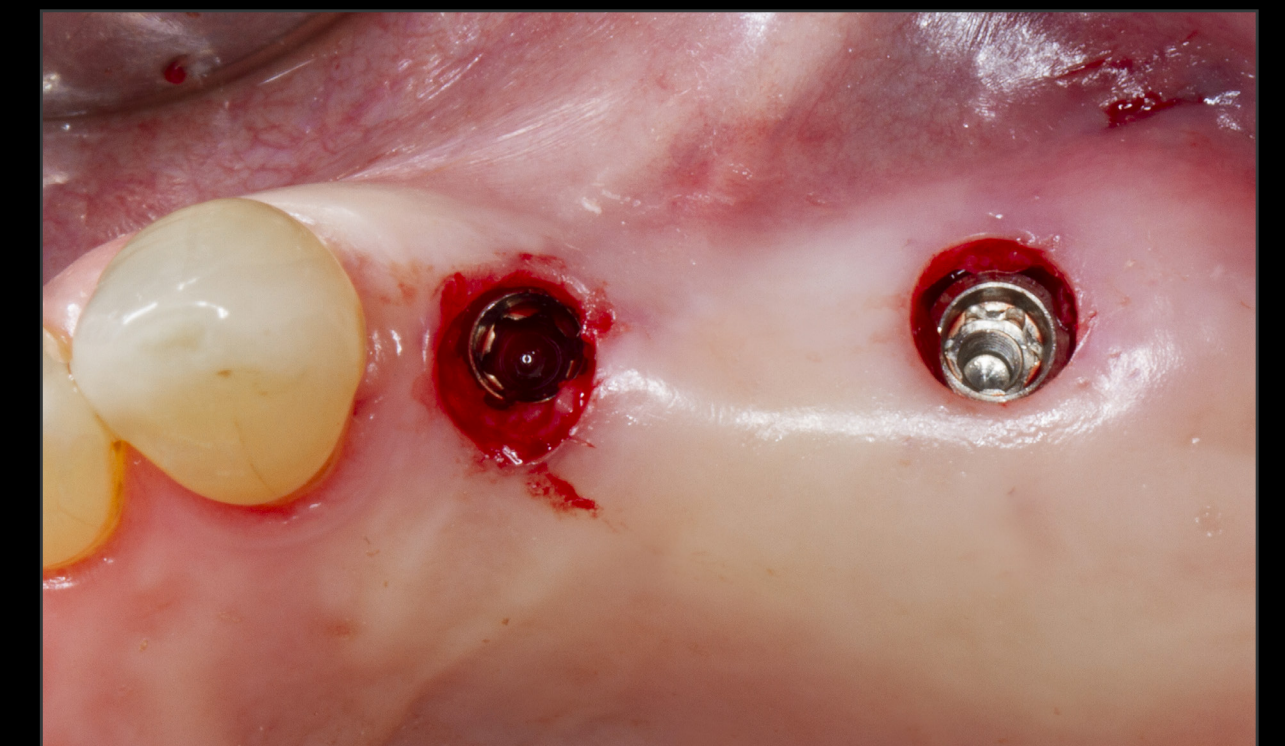
Circular cut of the tissue punch using surgical guide.



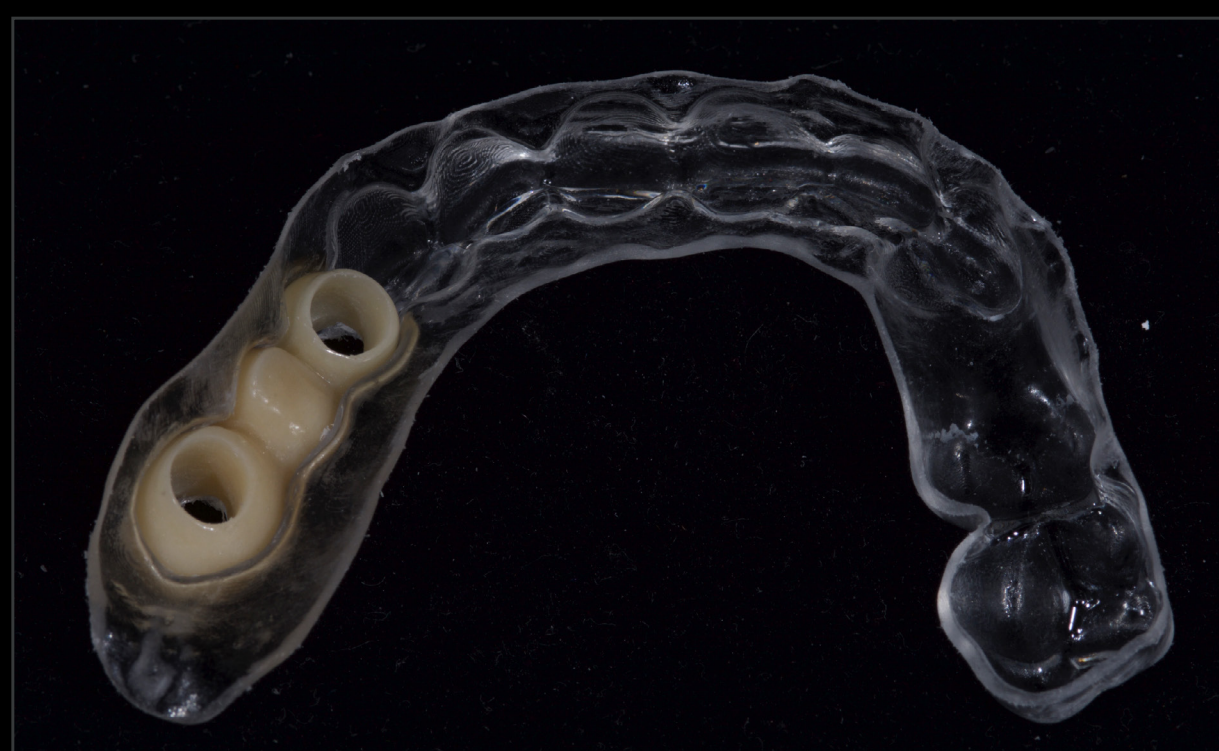
Pilot drill (Ø2.2mm) in action: the drilling procedure must be carried out till the stop.



Straumann® BLX implant ready to be engaged into the sleeve for the perfect guidance in the prepared bone site.



Occlusal view of the Straumann® BLX implant after placement.



The resin shell containing the temporary bridge drives the placement of the bridge into the exact position.



The temporary screw-retained bridge delivery.



Soft tissue healing after 3 months, the emergence profiles are harmonious and natural.



Traditional impression is taken.

THREE-UNIT BRIDGE IN POSTERIOR AREA WITH STRAUMANN® BLX IMPLANTS AND IMMEDIATE PROSTHESIS

A CLINICAL CASE REPORT BY SERGIO PIANO, ITALY

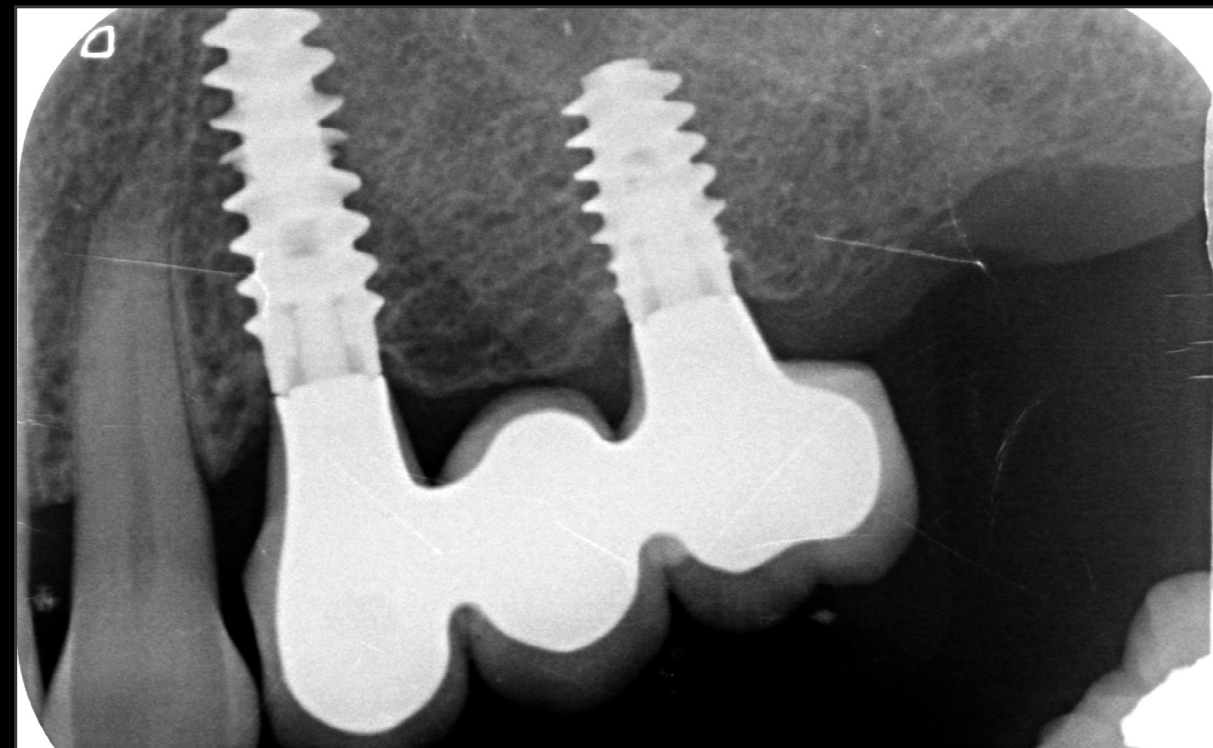


DETAILS

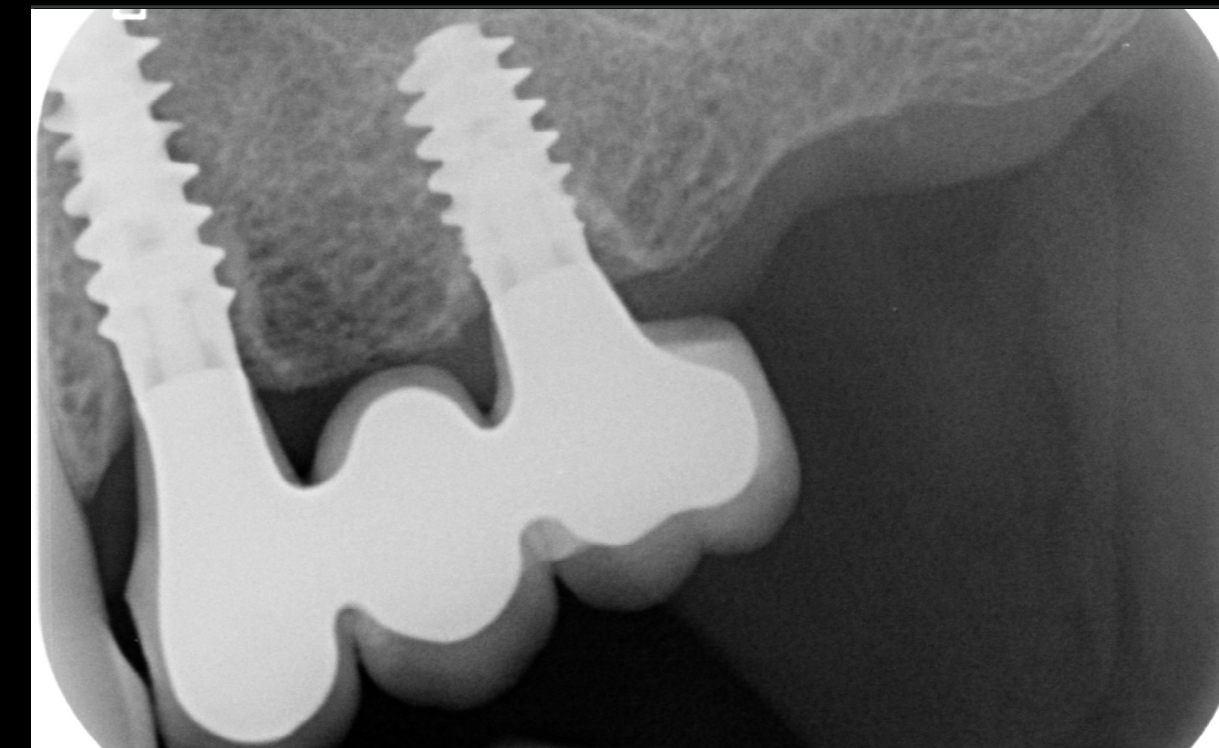
Treatment Outcome



Definitive screw-retained implant bridge delivery.



Radiographic control after screw-retained bridge delivery.



Radiographic control after 2 years shows the integration of the implants and the precision of the prosthetic work.

Patient's Experience

"I am very satisfied with the results obtained. Everything I was looking for could be achieved and even though I was traumatized by previous treatments, I am surprised that this treatment was very comfortable for me."

Before



After 2 years



STRAUMANN® iEXCEL

CASES FULL-ARCH

iEXCEL*

STRAUMANN®
PERFORMANCE
SYSTEM

CASES FULL-ARCH



- Immediate maxillary full-arch with digital workflow with Straumann® BLC implant
 - ▶ Andre Chen, Portugal
- Full-arch rehabilitation with Straumann® TLX implants in severely resorbed mandible
 - ▶ Swart & Van Zyl, South Africa

IMMEDIATE MAXILLARY FULL-ARCH WITH DIGITAL WORKFLOW WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY ANDRE CHEN, PORTUGAL

IMMEDIATE MAXILLARY FULL-ARCH WITH DIGITAL WORKFLOW WITH STRAUMANN BLC

A CLINICAL CASE REPORT BY ANDRE CHEN, PORTUGAL



EXPERT



Andre Chen

Portugal

DETAILS

- Co-founder International Advanced Dentistry IAD
- Oral Surgery Specialist – OMD College of Portugal
- Doctor in Oral Surgery and Medicine (PhD)
- Oral Surgery Post-Graduate Course (2008–2011, FMDUL Lisbon)
- NYU College of Dentistry, Implant Dentistry Alumni (2006–2008, New York)
- NYU Continuing Education Oral Rehabilitation Program (2004–2006, New York)
- Clinical Dental Research Program (2012, Washington University, Seattle)
- Master of Science in Bone Regeneration (MSc, FMDUL Lisbon)
- Graduated in Dentistry at FMDUL, Lisbon University
- Oral Surgery and Implant Dentistry Faculty, FMDUL since 2004

IMMEDIATE MAXILLARY FULL-ARCH WITH DIGITAL WORKFLOW WITH STRAUMANN BLC



A CLINICAL CASE REPORT BY ANDRE CHEN, PORTUGAL

DETAILS

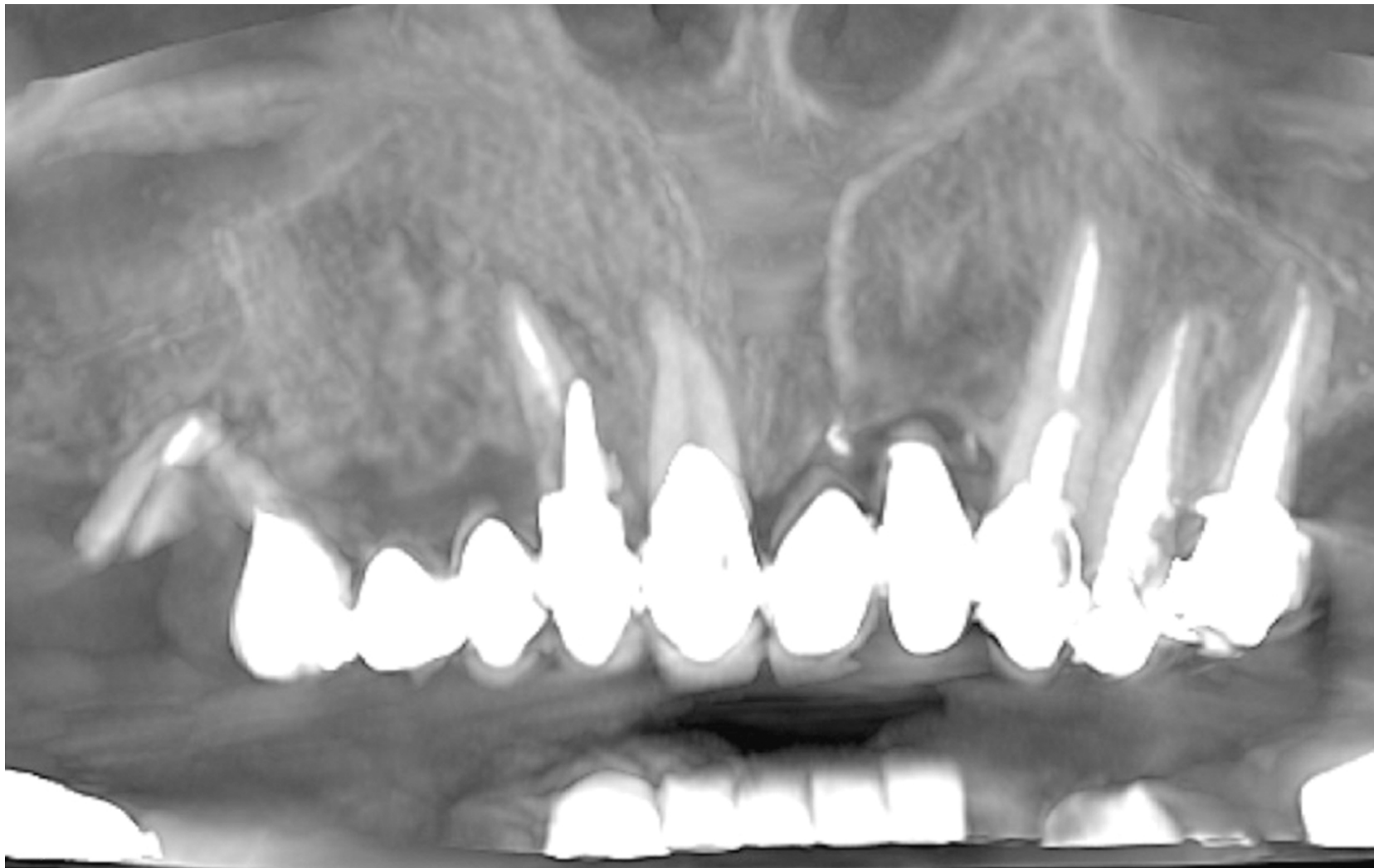
Patient Information

Gender	F
Age	62
Jaw	Maxilla
Health status	Healthy
Bone type	IV
Local infection	No
Anatomical defects	No
Risk factors	None

Initial Situation



Initial intraoral situation of both arches



CBCT analysis reveals teeth status and available bone before implantation

Treatment Planning

- Patient with a story of Crown and bridge work, non-esthetic, with recurrent decay, fractures and root remnants
- Digital Smile design with Smilecloud and treatment planning with CoDiagnostiX®
- 2 guides were produced – One (tooth supported) guide to anchor the palatal pins and the other (Palatal-Pin supported) to use those pins for a Pilot drill procedure
- Placement of 4 apically tapered implant Straumann® BLC® Ø 3.75 × 12 mm SLActive® Roxolid®(#22, #12 ,#14,#24) and 2 Straumann® BLC® Ø 3,75 × 14 BLC (#26,#16)
- Immediate provisional fixed restoration delivered

IMMEDIATE MAXILLARY FULL-ARCH WITH DIGITAL WORKFLOW WITH STRAUMANN BLC

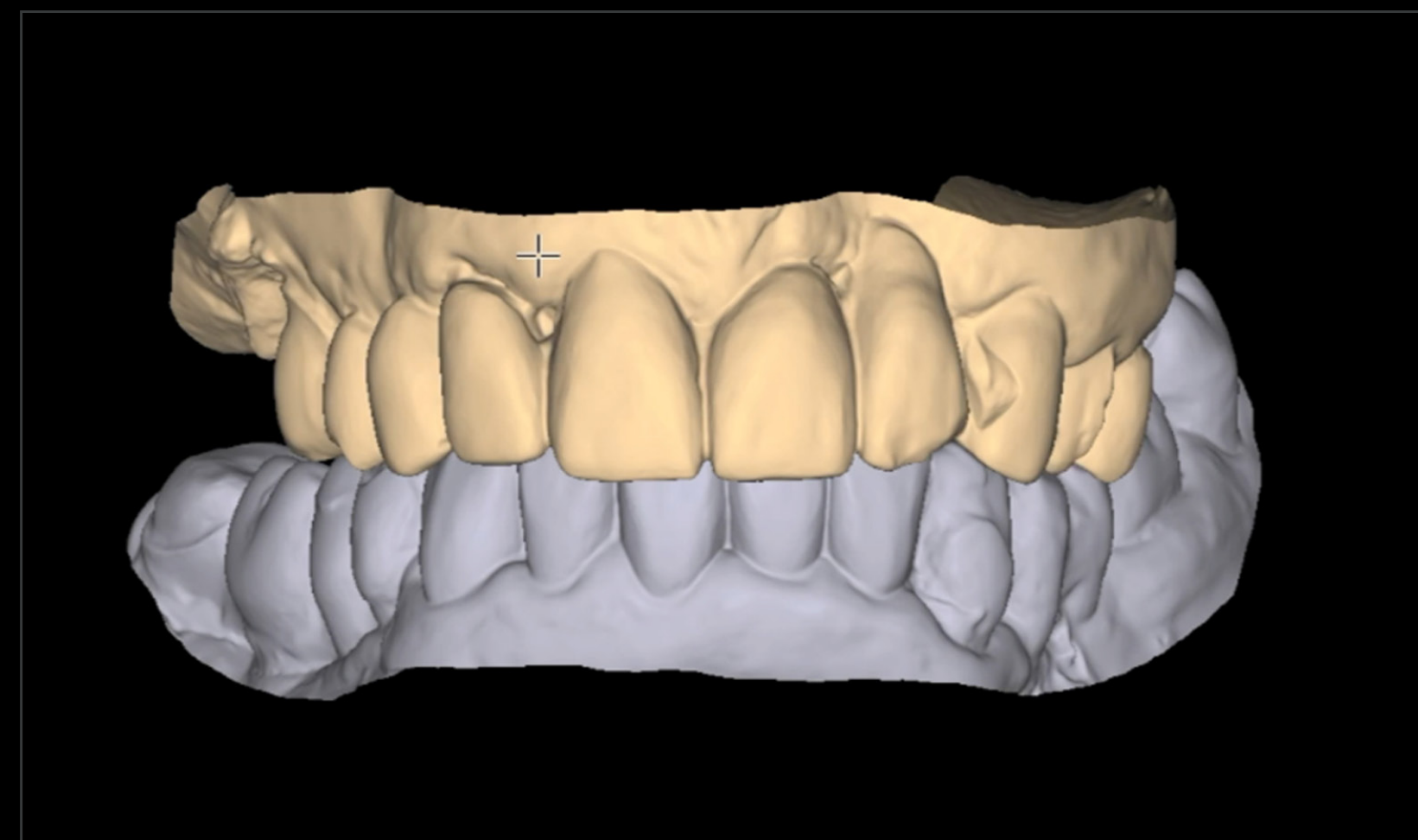
A CLINICAL CASE REPORT BY ANDRE CHEN, PORTUGAL



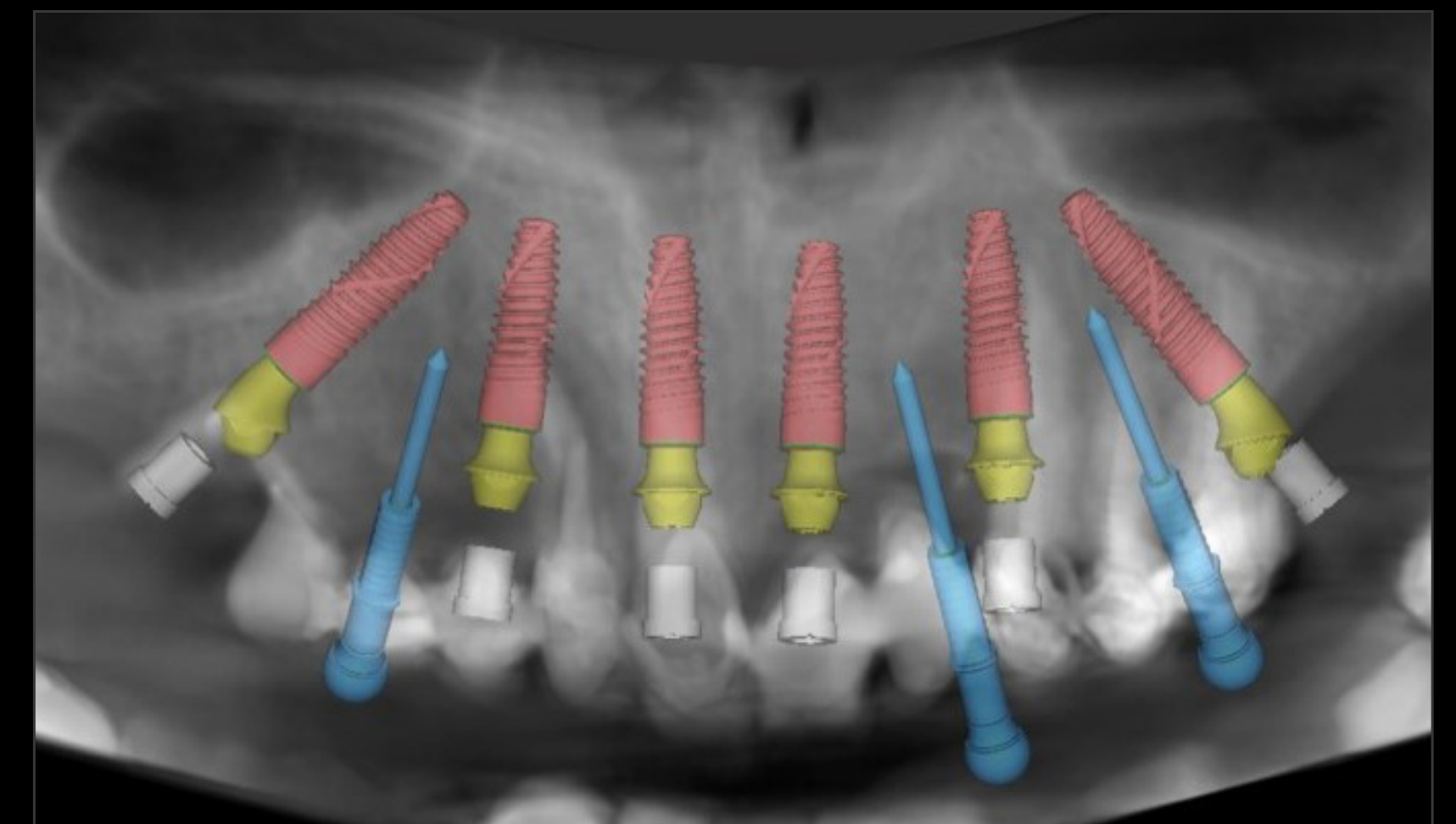
DETAILS



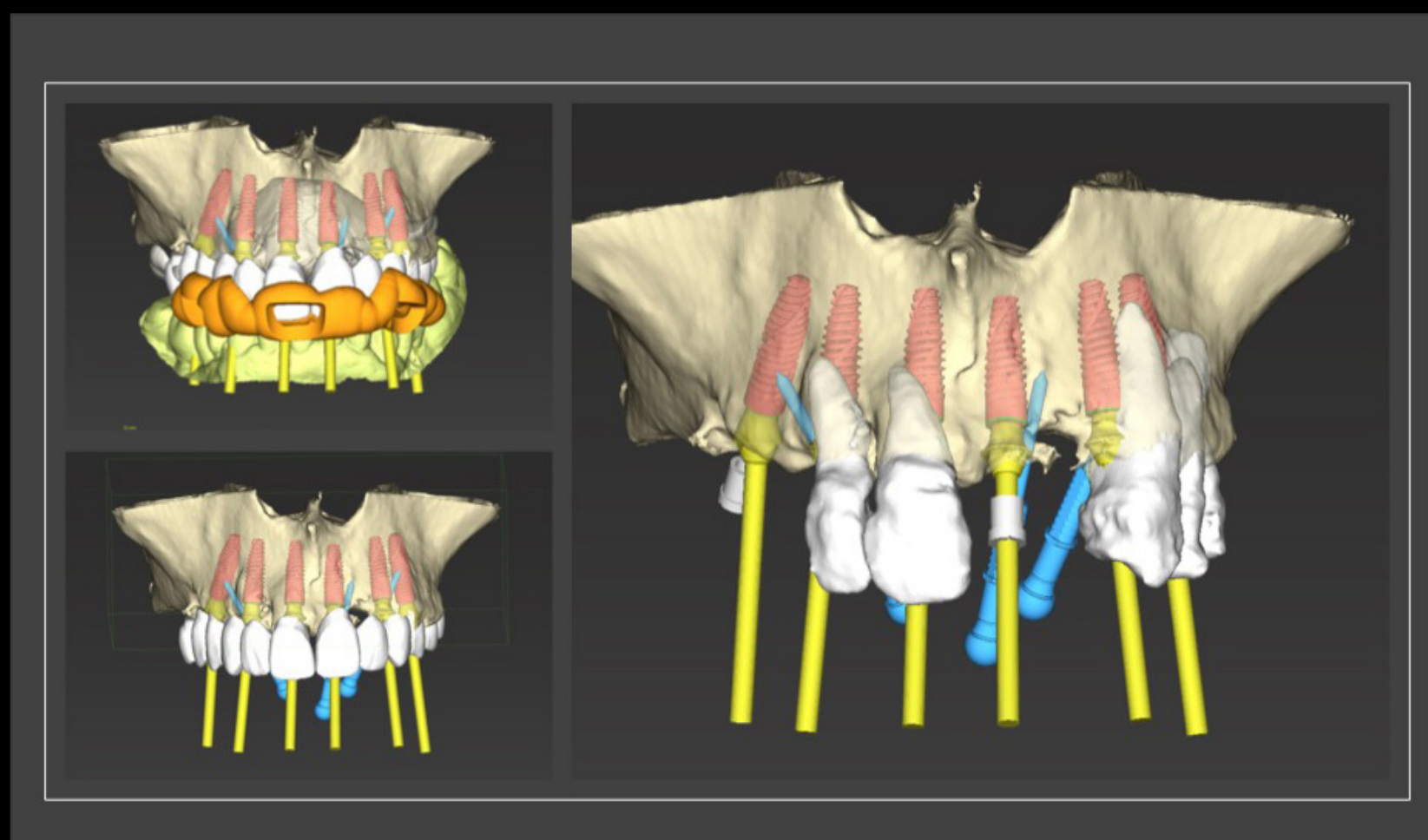
Digital smile design using Smilecloud.



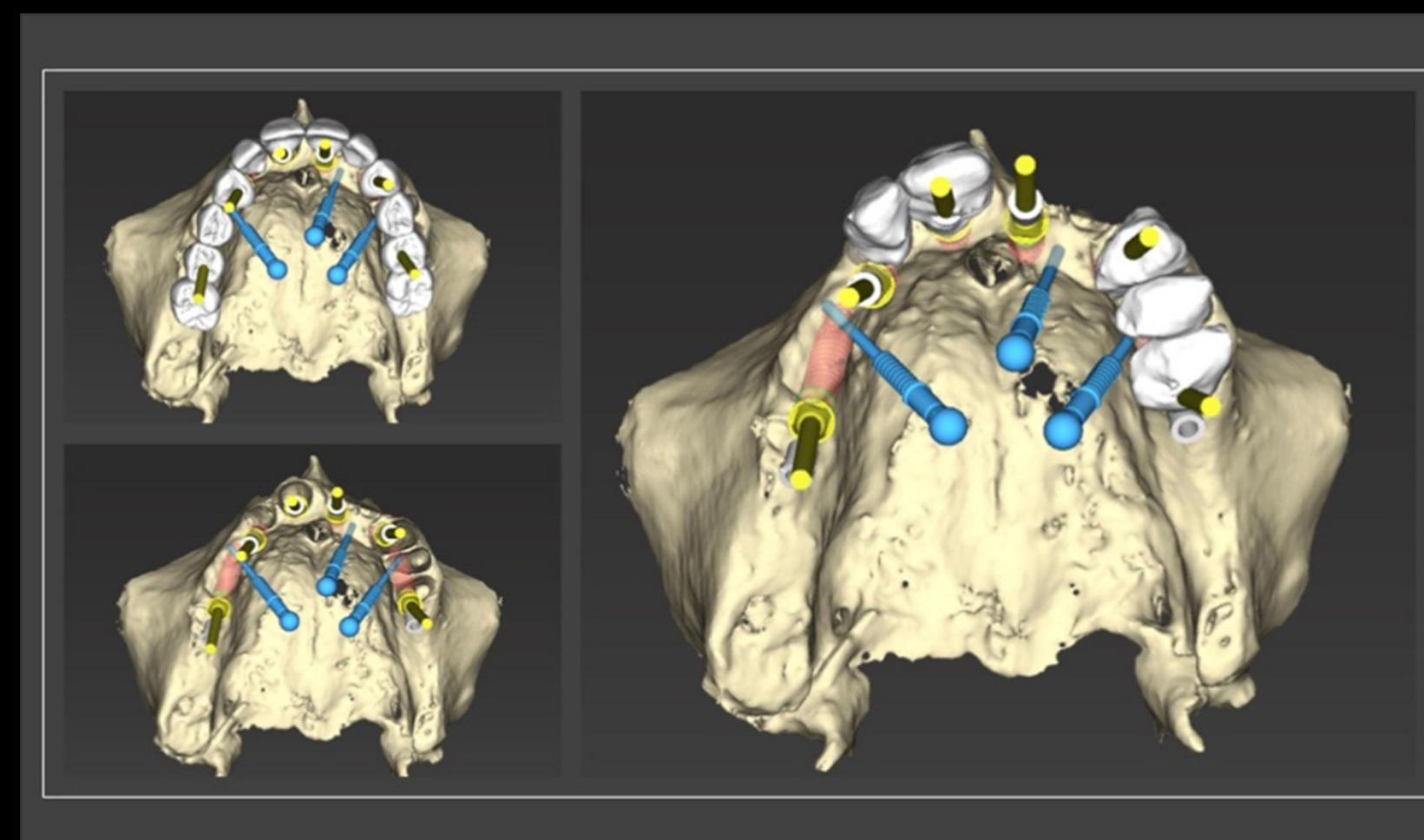
3D virtual impression position between arches.



Implant and abutment final position during digital planning with coDiagnostiX®.



Full-arch digital planning in the maxilla. Alignment of implants' positions and surgical guide 3D position.



Occlusal view of full-arch digital planning with BLC implants. Surgical guide fixation pins in blue.



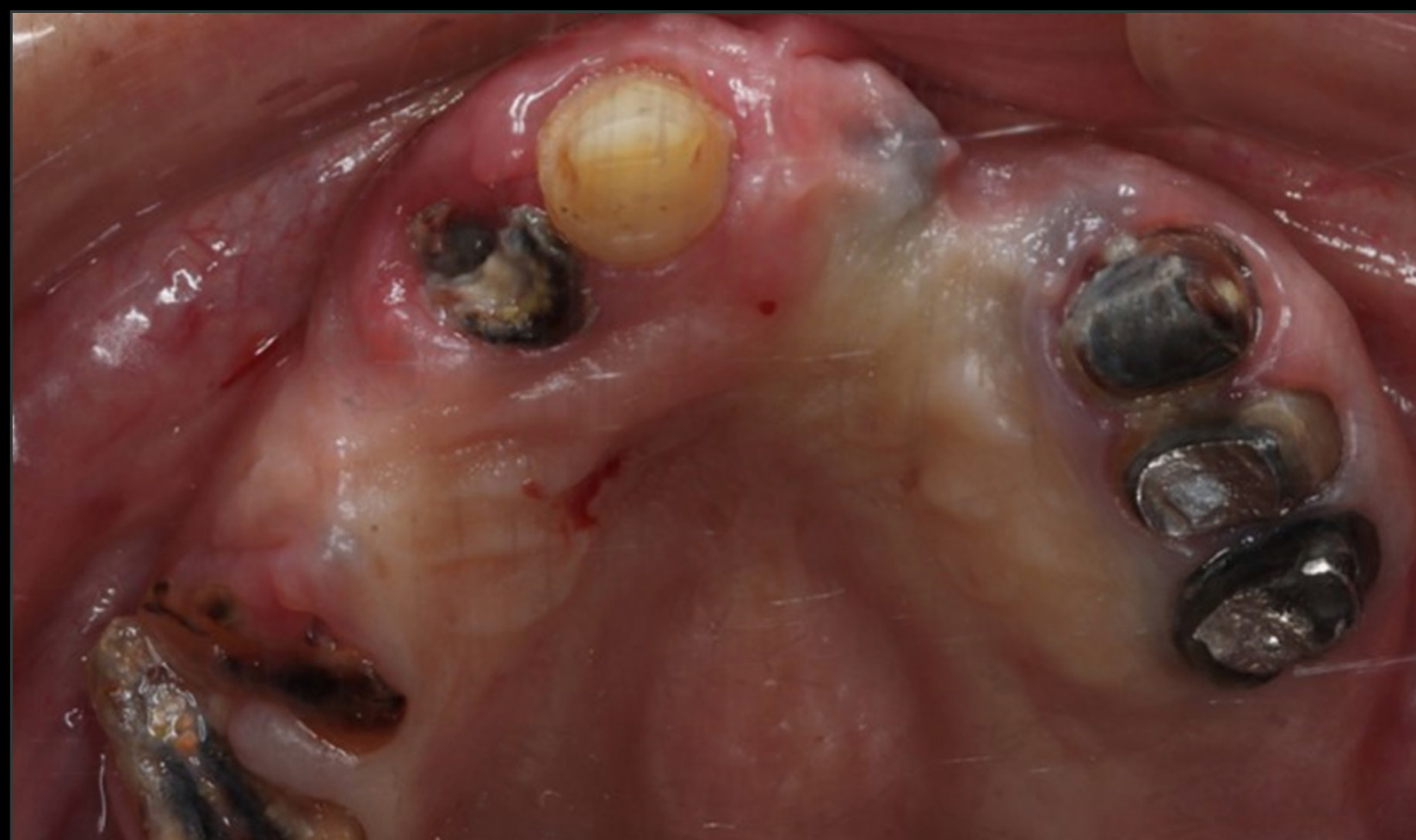
1st guide tooth supported in correct position.

IMMEDIATE MAXILLARY FULL-ARCH WITH DIGITAL WORKFLOW WITH STRAUMANN BLC

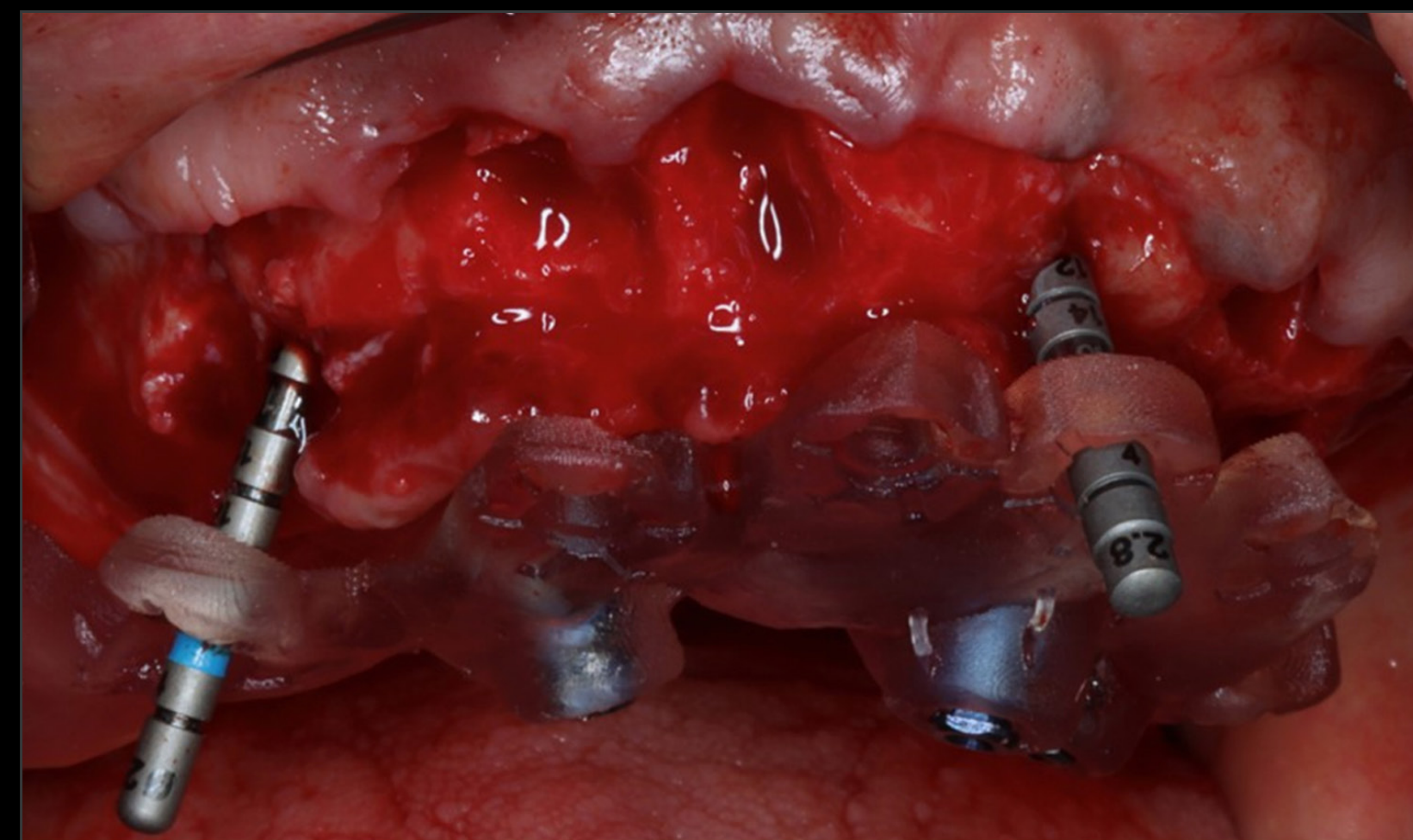
A CLINICAL CASE REPORT BY ANDRE CHEN, PORTUGAL



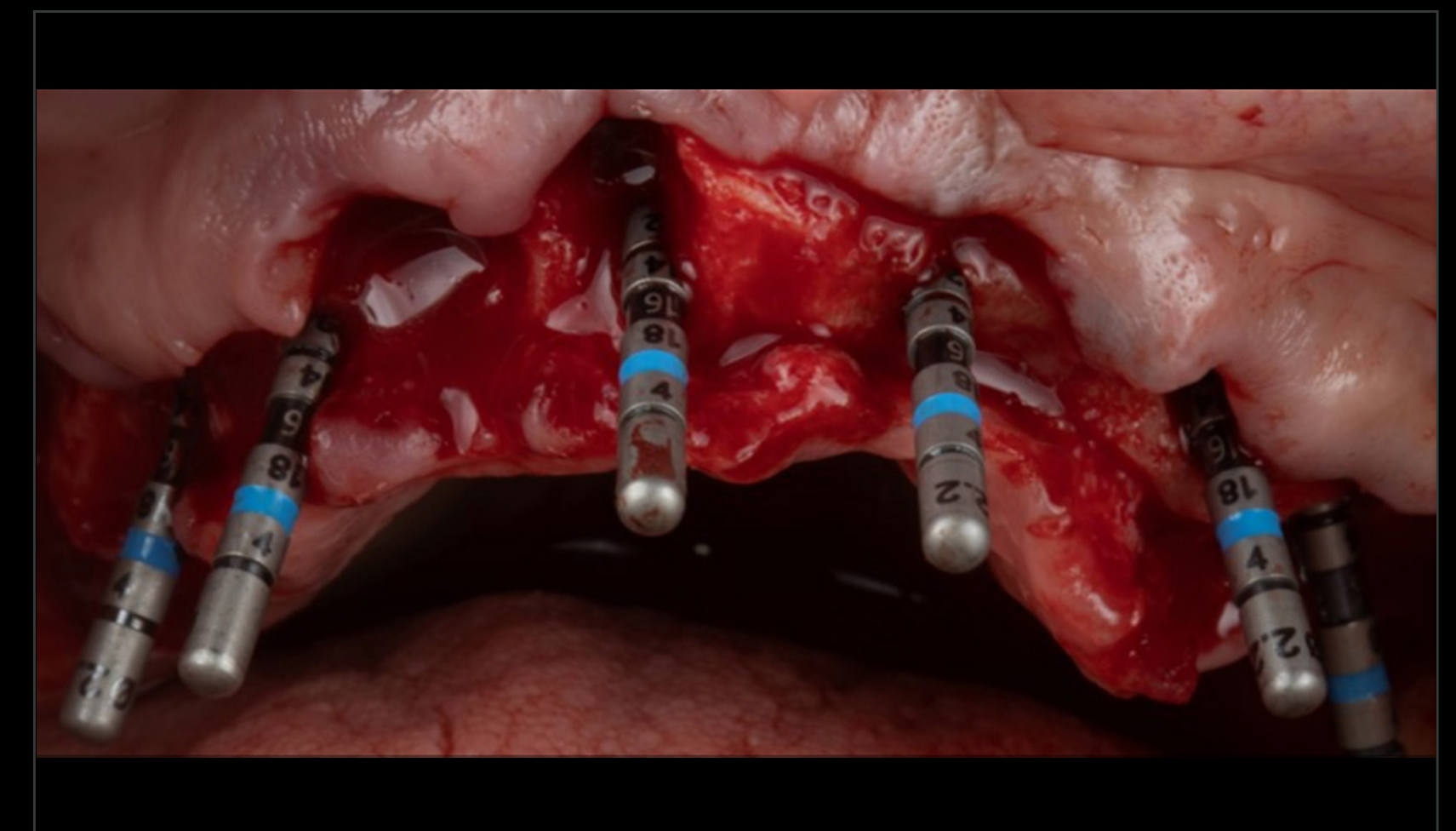
DETAILS



Intraoral situation after removing bridges and crowns.



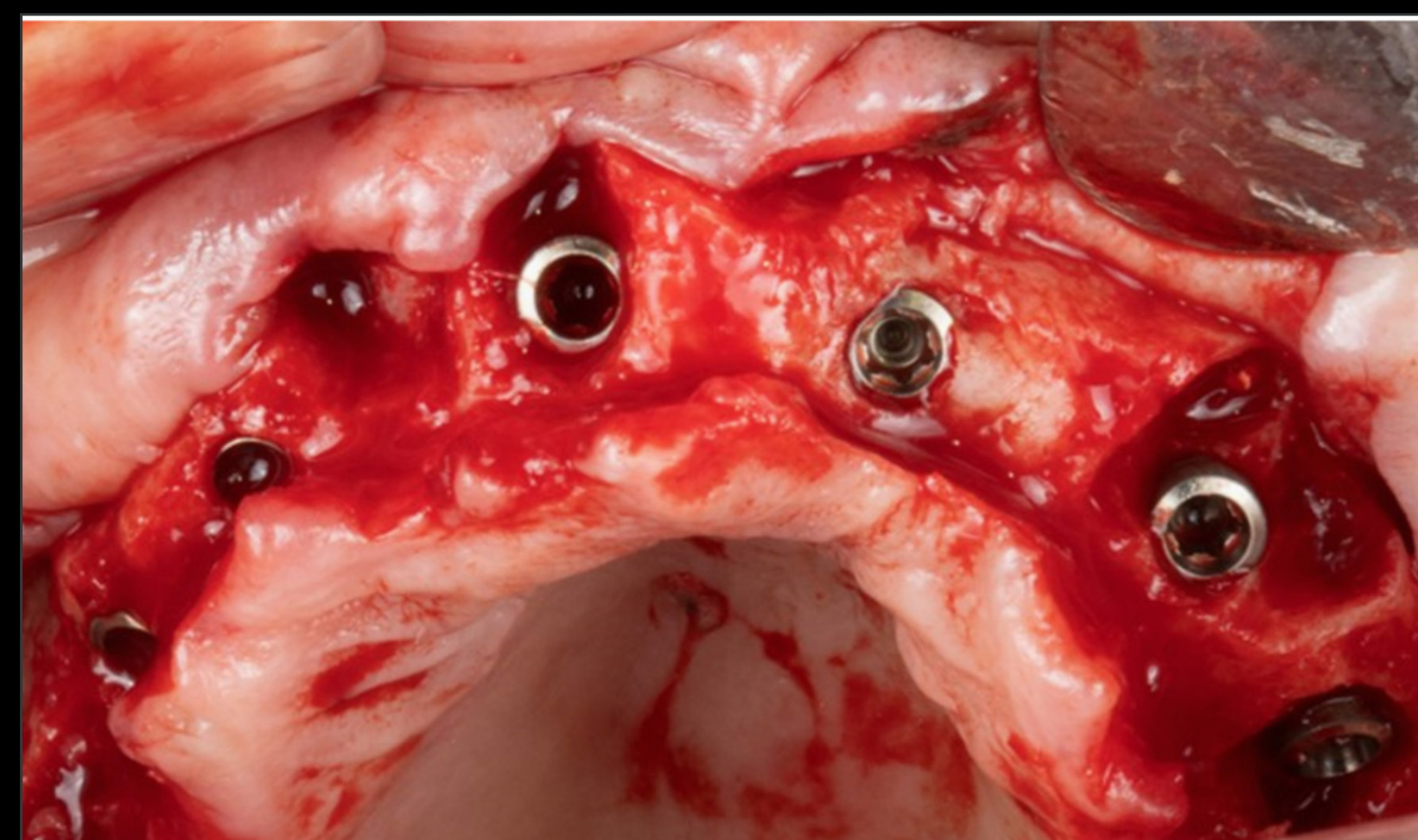
Surgical guide with the alignment pins to check the right drilling angulation.



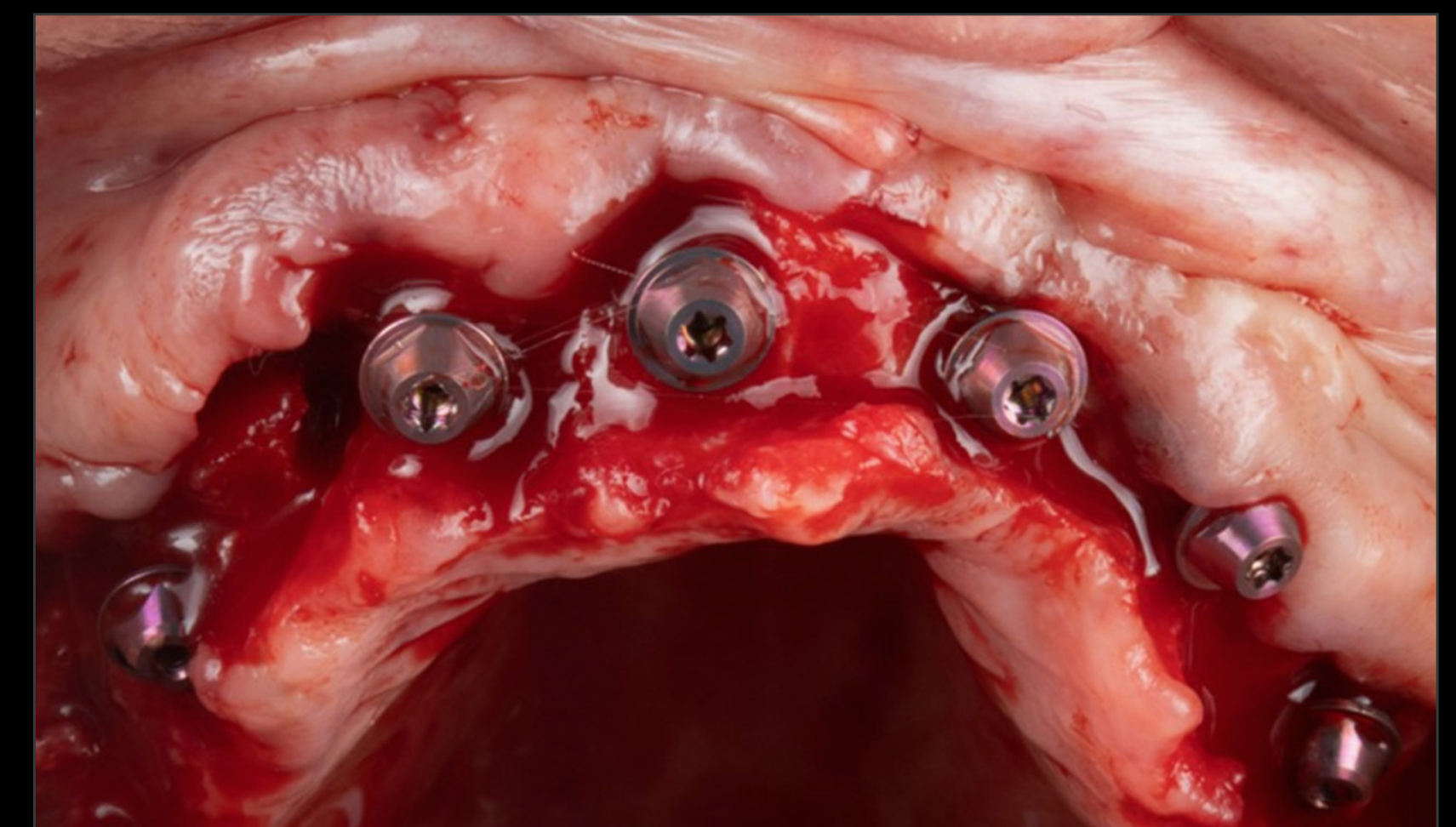
Alignment pins to check the right alignment between implants.



Straumann® BLC Ø3.75 × 12 mm, SLActive®, Roxolid®



Implants in final position.



Screw retained abutments in correct position.

IMMEDIATE MAXILLARY FULL-ARCH WITH DIGITAL WORKFLOW WITH STRAUMANN BLC



A CLINICAL CASE REPORT BY ANDRE CHEN, PORTUGAL

DETAILS

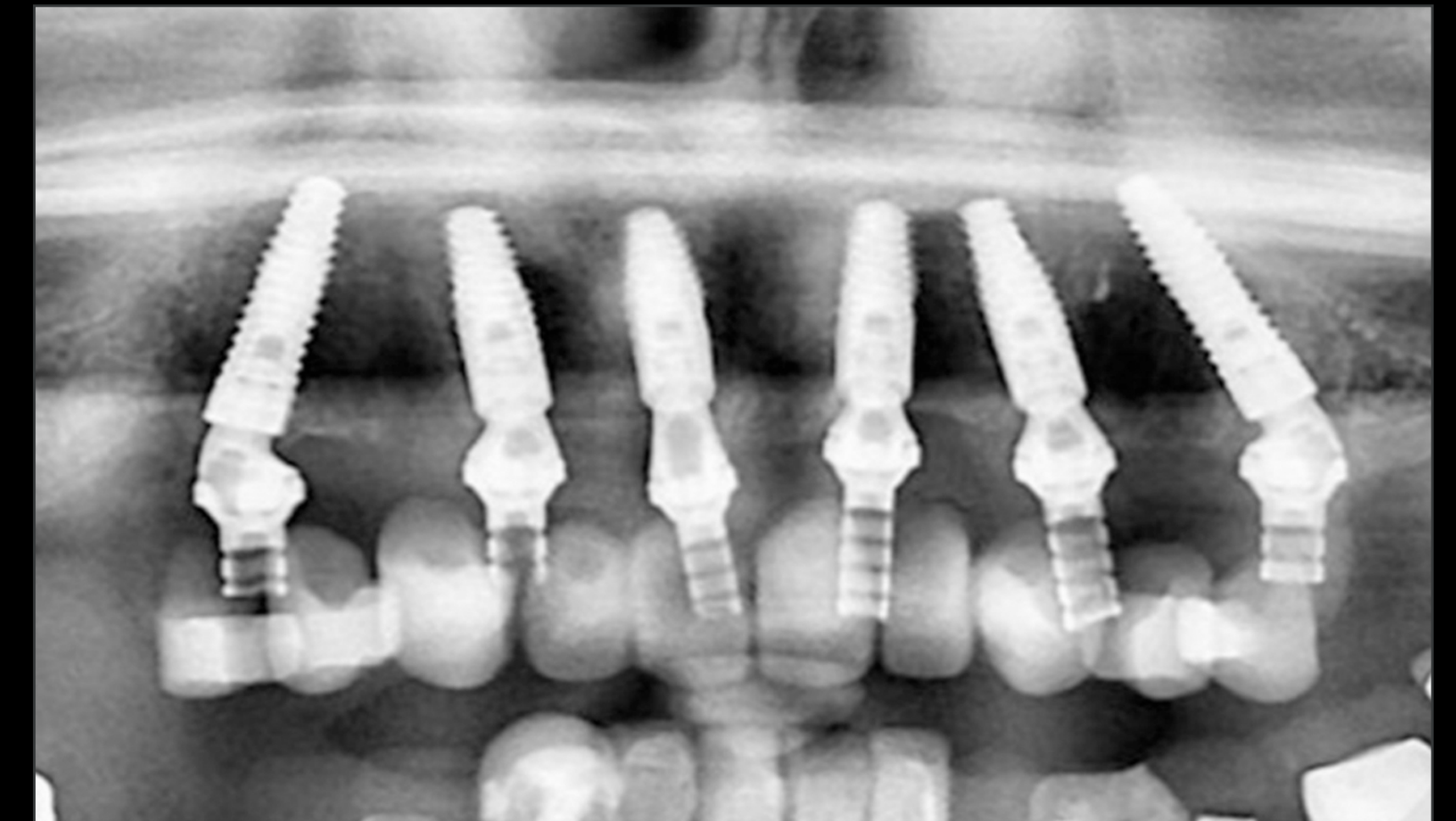
Treatment Outcome



Provisional screw-retained upper full-arch restoration



Provisional fixed restoration in final position



Radiographic control. Provisional fixed restoration in final position

Feedback from the Clinician

"I had a great time with the BLC family, the Velodrill system is fine-tuned with the implant macrogeometry making it easy for implant insertion, torque and immediacy. Belonging to the iEXCEL family allows me to be efficient (clinically and business-wise) with prosthodontic components.

It will be for sure in my portfolio of Full Mouth Cases.."

FULL-ARCH REHABILITATION WITH STRAUMANN® TLX IMPLANTS IN SEVERELY RESORBED MANDIBLE

**A CLINICAL CASE REPORT BY
BLACKIE SWART / PAUL VAN ZYL, SOUTH AFRICA**

FULL-ARCH REHABILITATION WITH STRAUMANN® TLX IMPLANTS IN SEVERELY RESORBED MANDIBLE

A CLINICAL CASE REPORT BY BLACKIE SWART / PAUL VAN ZYL, SOUTH AFRICA



EXPERT



Blackie Swart
South Africa



Paul van Zyl
South Africa

DETAILS

Blackie Swart

- Master's degree in Maxillofacial and Oral Surgery (Cum Laude) from Stellenbosch University, Cape Town, South Africa.
- Ambassador board of the European Association for Osseointegration.
- Honorary consultant in the department of MFOS, University of Western Cape (UWC).
- ITI fellow.

Paul van Zyl

- Master's degree in Prosthodontics (Cum Laude) from Stellenbosch University, Cape Town, South Africa.
- ITI Education Delegate for the ITI Section Southern African from 2007-2016 and Section Chairman from 2016-2020.
- Member and past Chairman of the Academy of Prosthodontics South Africa.
- ITI fellow.

Feedback from the Clinicians

"An immediately loaded hybrid prosthesis is a highly predictable and stable solution for an edentulous mandible if no vertical bone is available behind the mental foramina for implants. During this surgery, the innominate blood vessel was identified to prevent intra-operative bleeding which can lead to potentially life-threatening swelling and airway compromise; also, the anterior loop of the mentalis nerve was not easily identifiable on 3D X-ray analysis; after positive clinical identification, the alveolar ridge can be reduced to accommodate the width of the implants as well as the height of prosthetic hardware as needed. To ensure that the implants are correctly positioned to support the hybrid prosthesis, a stent is always used."

FULL-ARCH REHABILITATION WITH STRAUMANN® TLX IMPLANTS IN SEVERELY RESORBED MANDIBLE



A CLINICAL CASE REPORT BY BLACKIE SWART / PAUL VAN ZYL, SOUTH AFRICA

DETAILS

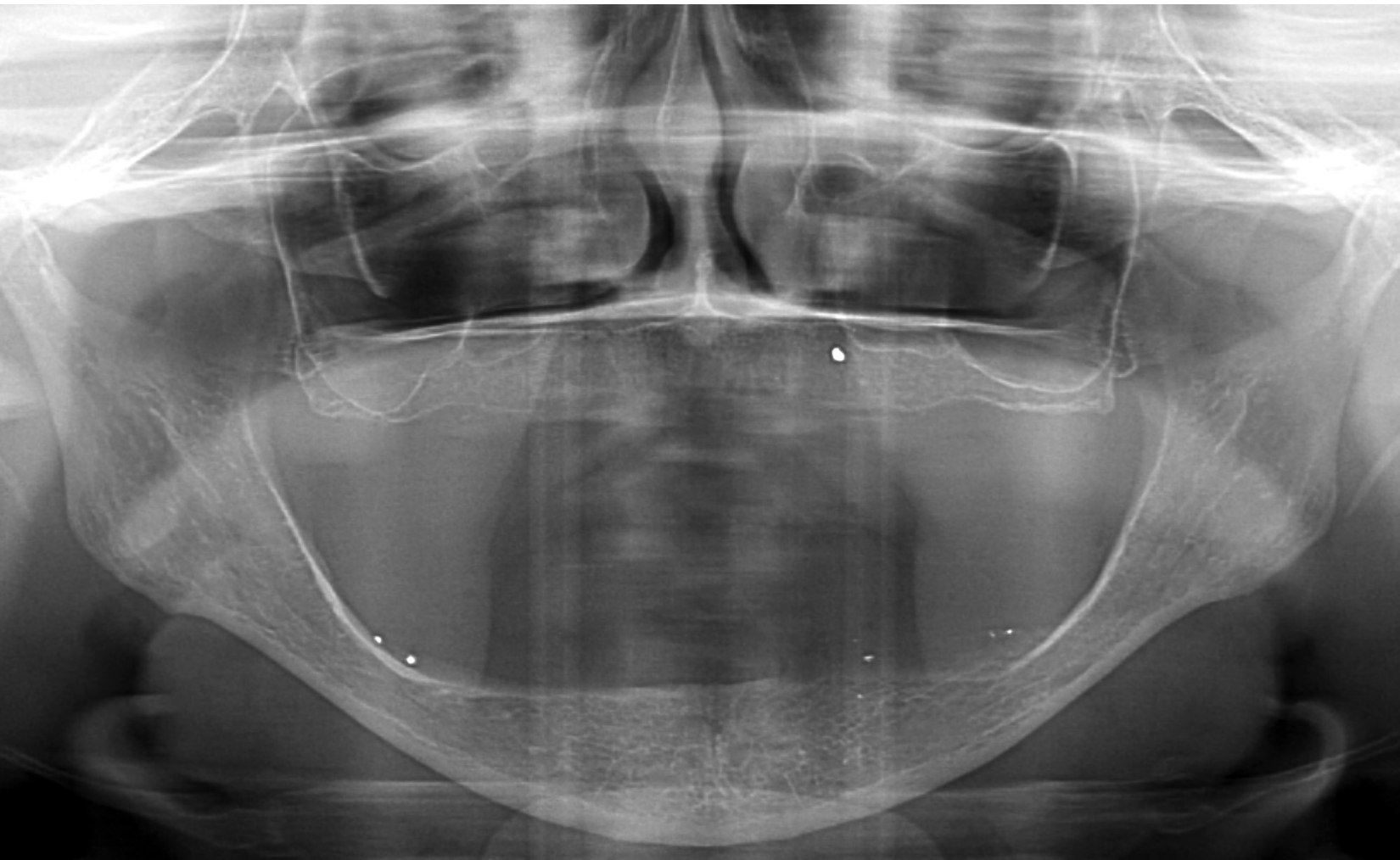
Patient’s Chief Complaint

“I have been wearing a full prosthesis for many years, but it is very difficult for me to eat and talk with it because the lower one moves constantly—this causes very painful sores. This situation has a negative impact on my health and quality of life.”

Patient Information

Age	74
Jaw	Mandible
Health status	Good
Smile line	High
Bone type	Type 1
Local infection	No
Anatomical defects	Yes
Risk factors	Mental nerves

Initial Situation



Panoramic view: severely resorbed ridges in the mandible



Intraoral view of edentulous mandible. Uneven vertical ridge
Muscle and fibrous bands. Sore spots/ulcerations are visible

Treatment Planning

- Prosthetic and esthetic analysis.
- Digital planification and lower denture converted to a surgical guide.
- 4 Straumann® TLX implant placement between the mentales anterior loops.
- Temporary prosthesis delivery.
- The definitive prosthesis includes a Straumann® Cares milled titanium bar attached to the Tissue Level portion of TLX implants. No intermediary abutments are required. The titanium at the bottom of the prosthesis and the implant connection facilitates the maintenance and resistance in the cantilever.

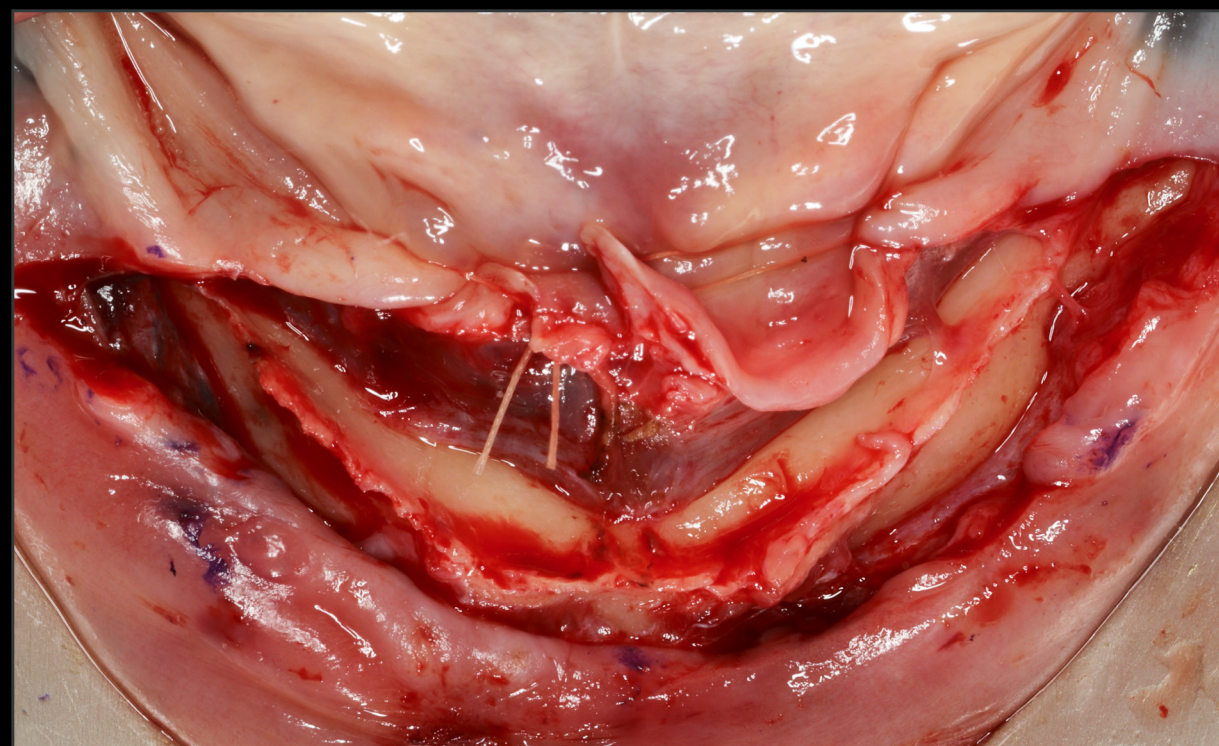
FULL-ARCH REHABILITATION WITH STRAUMANN® TLX IMPLANTS IN SEVERELY RESORBED MANDIBLE

A CLINICAL CASE REPORT BY BLACKIE SWART / PAUL VAN ZYL, SOUTH AFRICA

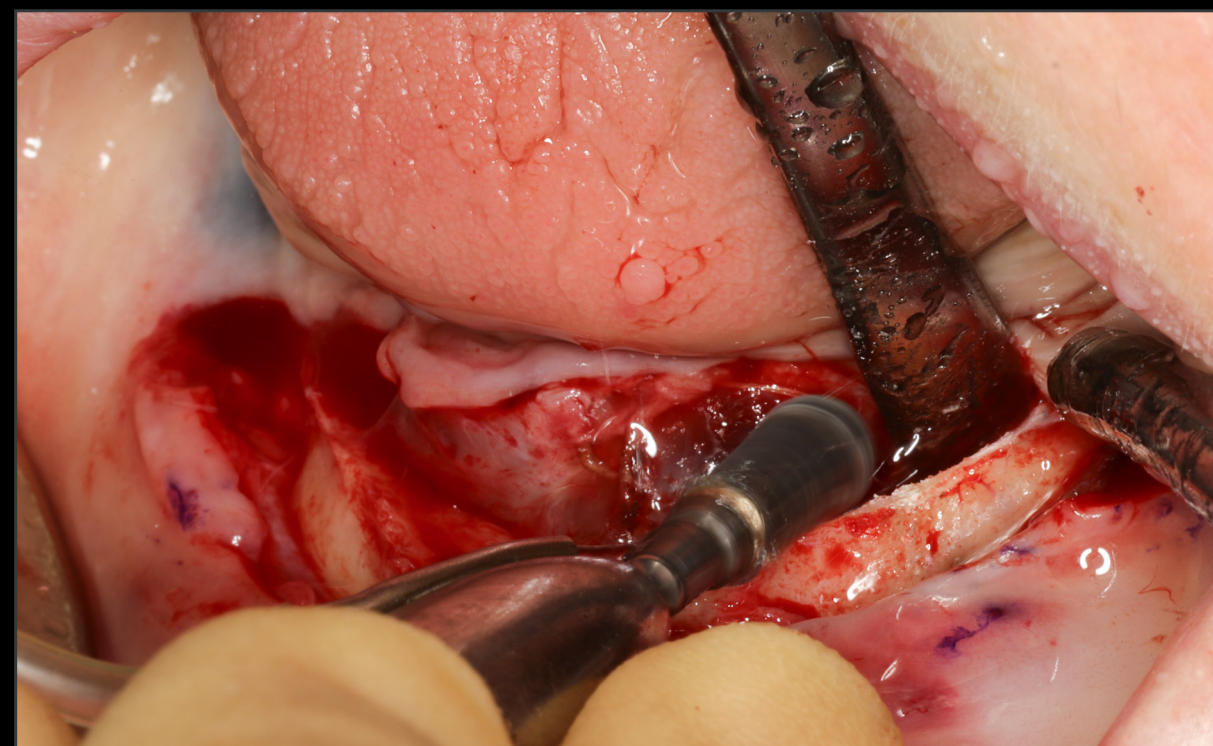


DETAILS

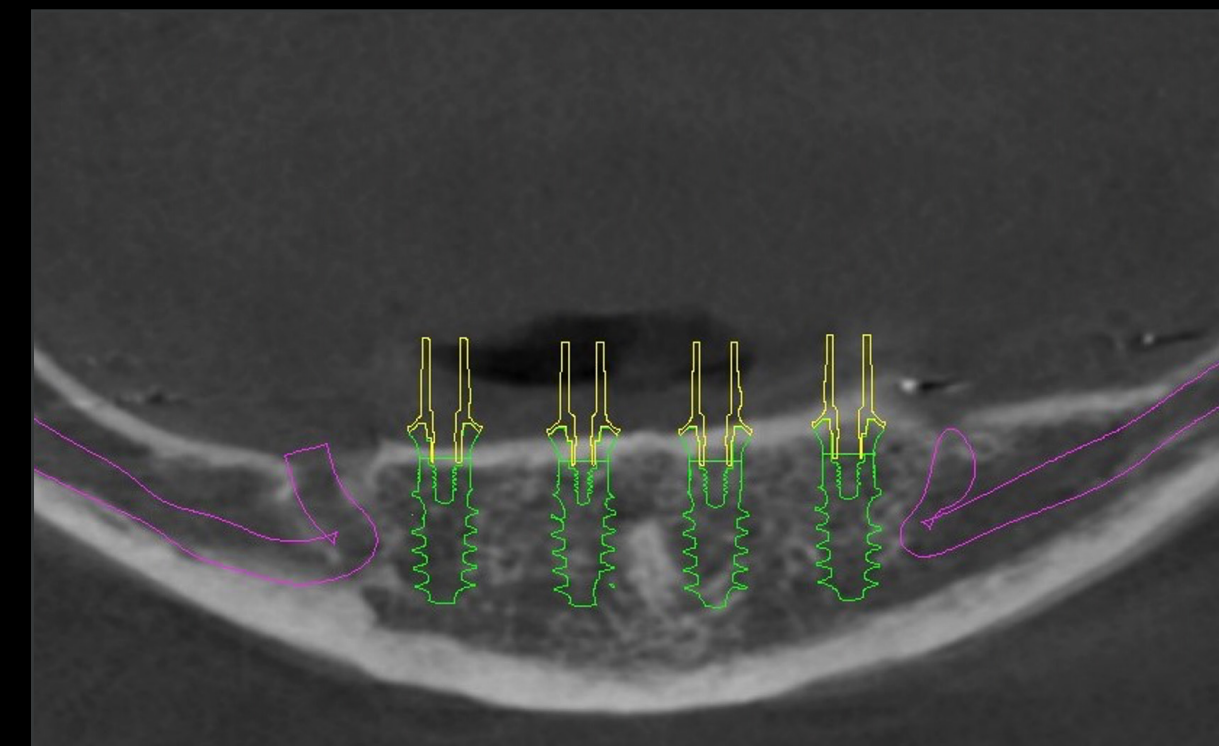
Surgical & Prosthetic Procedures



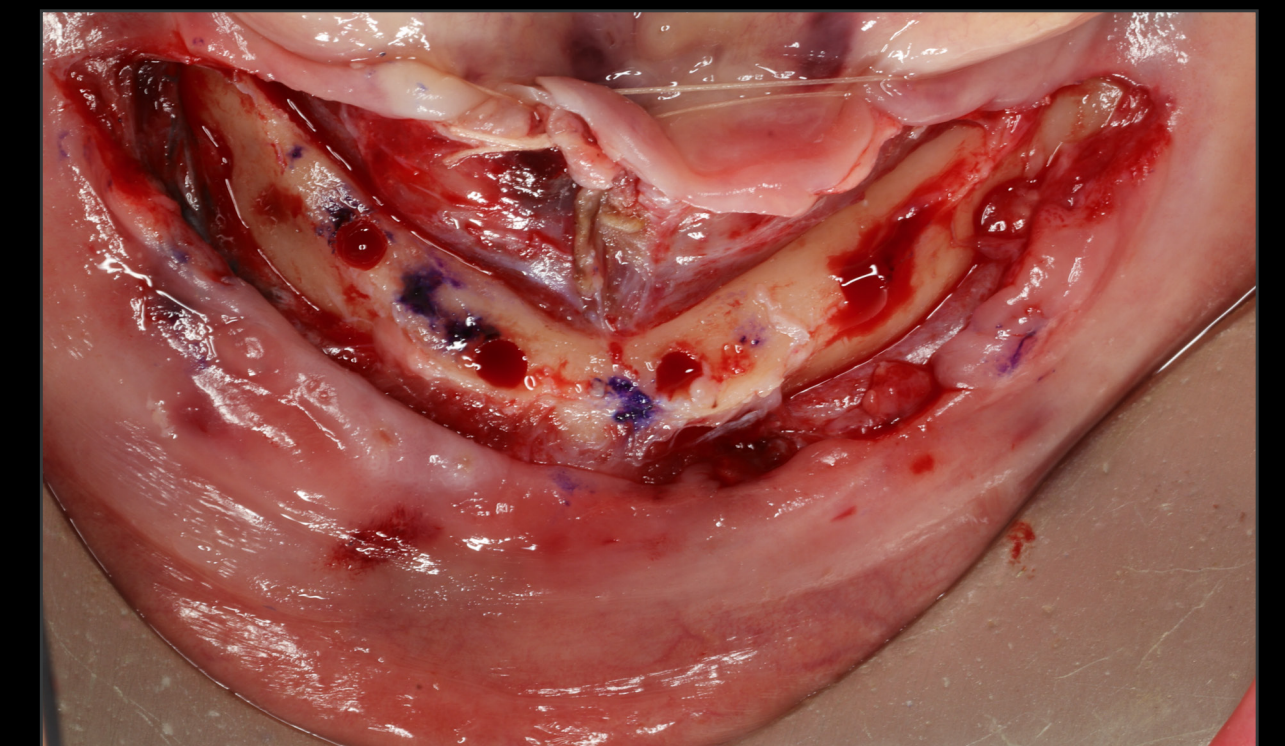
Crestal incision with distal relieving incision approximately 10 mm behind the mental foramina



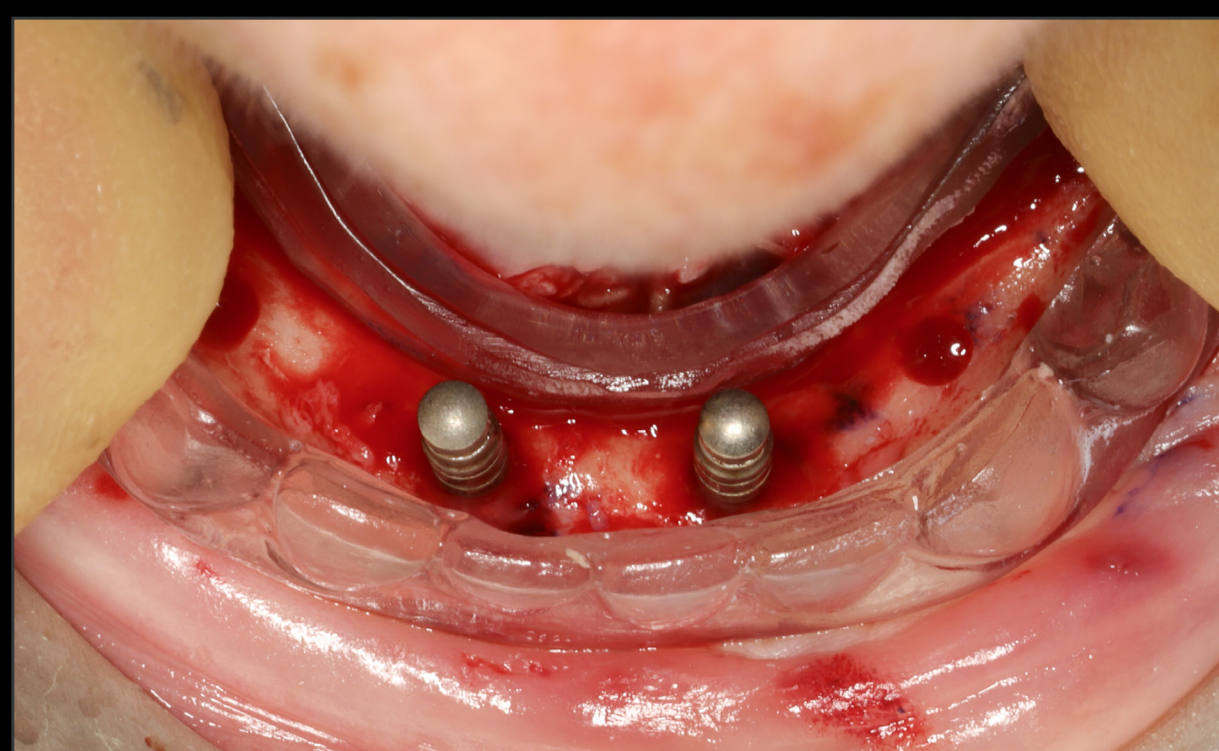
Vertical ridge reduction to achieve enough width for implants and sufficient space for prosthetic hardware



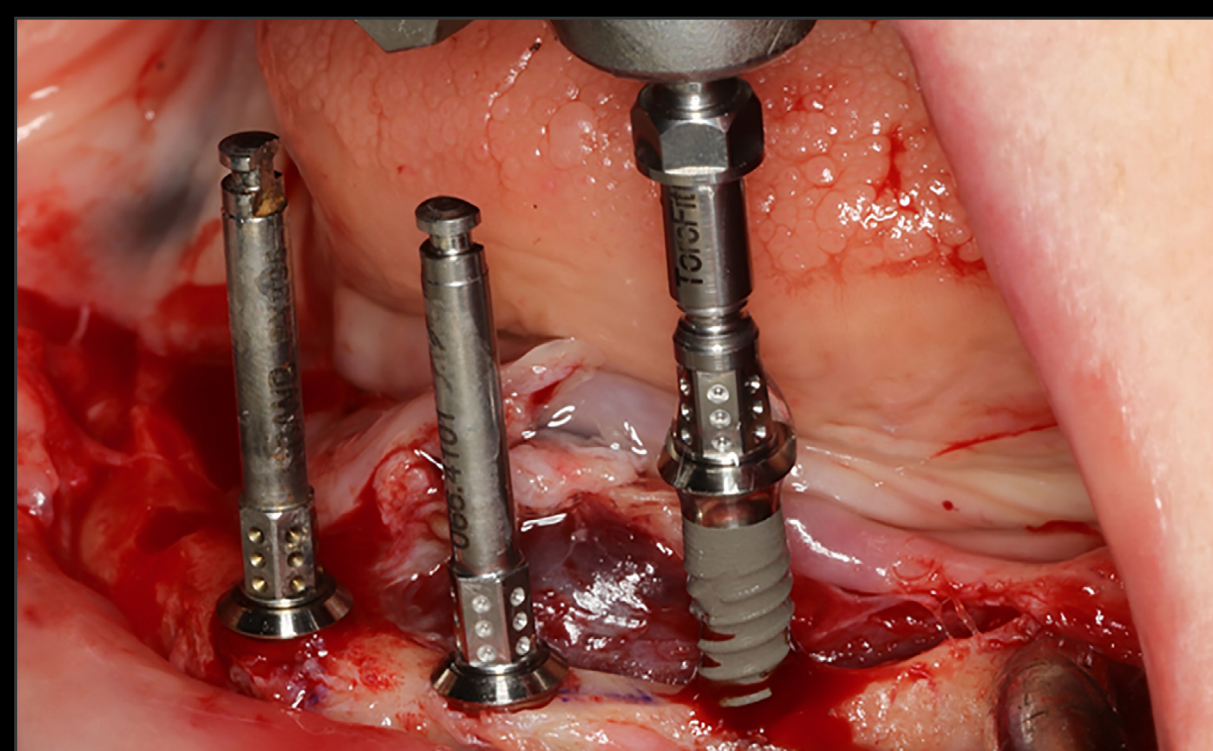
coDiagnostiX® implant placement planning
Distribution between mentales anterior loops



Implant positions are determined and marked. The mental nerves can clearly be identified



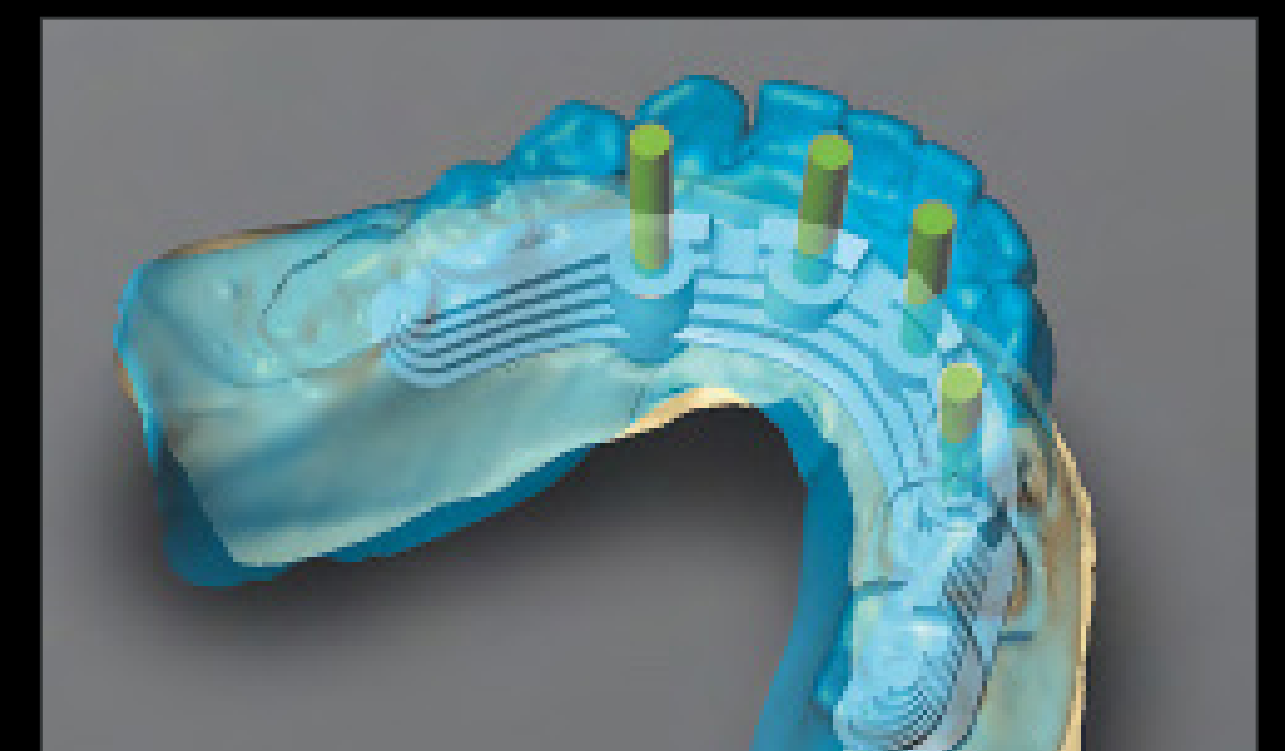
Pilot holes drilled, and the correct position is checked with the diagnostic template



Straumann® TLX implants parallelism evaluation.



Immediate load prosthesis with a shortened dental arch is placed within 24 hours of surgery



After 3 months of healing, a new impression was made to define the shape of the Straumann® Cares milled titanium bar

FULL-ARCH REHABILITATION WITH STRAUMANN® TLX IMPLANTS IN SEVERELY RESORBED MANDIBLE

A CLINICAL CASE REPORT BY BLACKIE SWART / PAUL VAN ZYL, SOUTH AFRICA



DETAILS

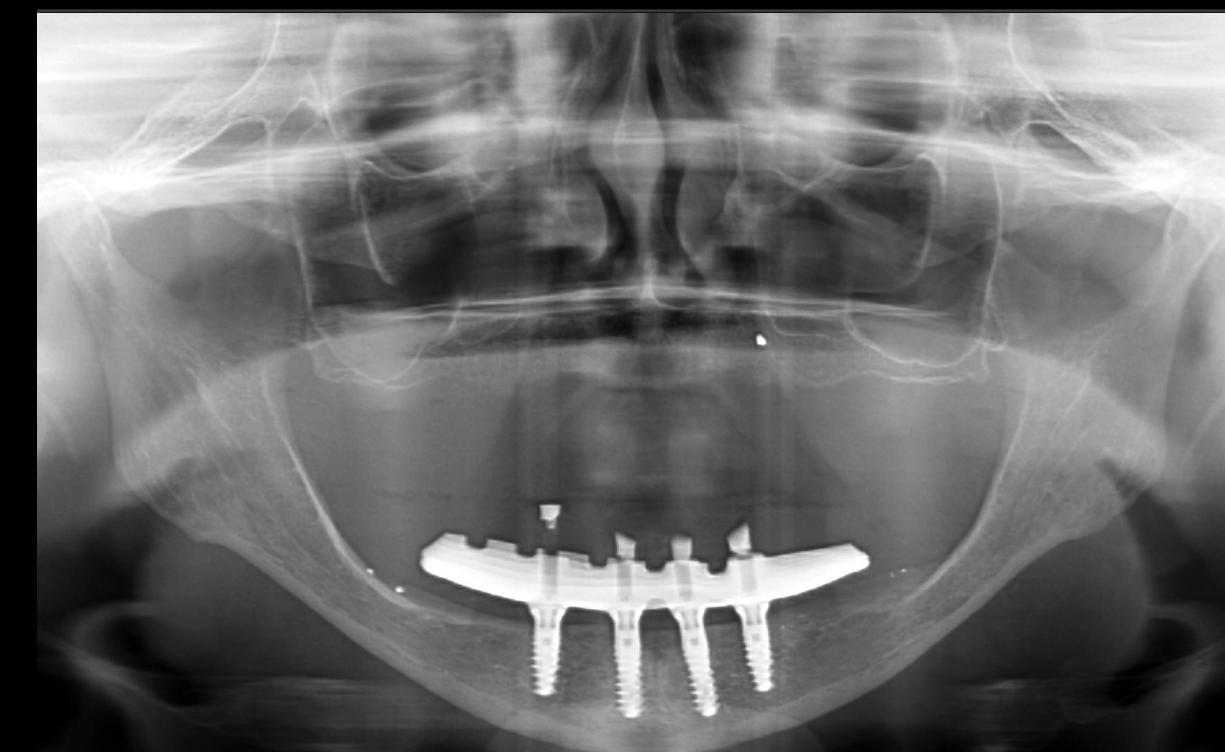
Treatment Outcome



Intraoral view of the final prosthesis
Radiographical control at prosthesis delivery



Intraoral view of the final prosthesis with the
upper antagonist after 2 years



Radiographic control after 2 years

Patient's Experience

"I could never believe that these implants could be so natural and comfortable in my mouth with absolutely no discomfort whatsoever. The actual operation and dental work performed in October 2020 by Dr. Swart was amazing, just brilliant. My teeth do not move around or need repositioning. They are well and truly fixed in place. I am exceedingly happy with the results that I have attained. I would without any reservations highly recommend this trailblazing procedure for a better quality of dental life."

Before



After 2 years



STRAUMANN® iEXCEL – EMPOWERING YOU TO EXCEL

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