REGIONAL CLINICAL CASEBOOK

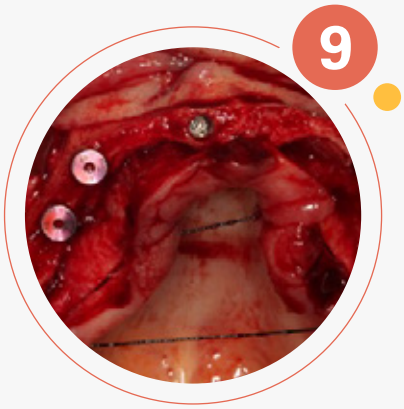
Module II

2025

SUMMARY

SUMMARY

SUMMARY

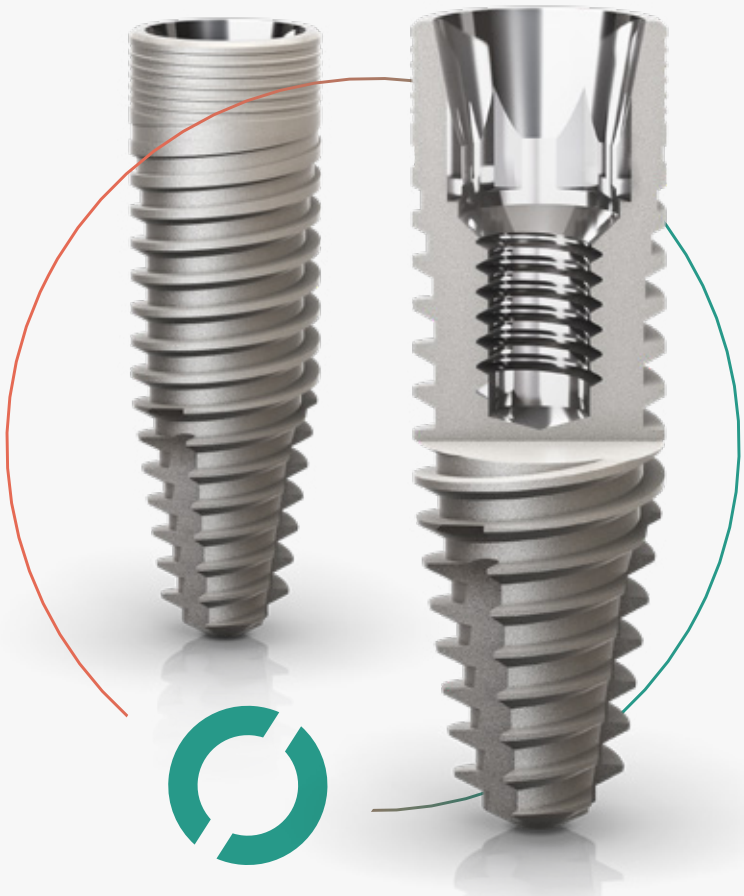


FULL MOUTH IMPLANT RECONSTRUCTION WITH NUVO: DIFFERENT TREATMENT OPTIONS FOR OPOSITE JAWS

Prof. Dr. Erhan Dursun
Dr. Mert Tezcan

SINGLE TOOTH REPLACEMENT WITH NUVO CONICALFIT™: IMMEDIATE PLACEMENT & LOADING

Prof. Dr. Doruk Koçyiğit
Dr. Tolga Pekperdahcı



FULL DIGITAL POSTERIOR SOLUTIONS WITH NON-HEX TI-BASES

CYPRUS

PROF. DR. OĞUZ OZAN

DR. İBRAHİM UFUK ATEŞ

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ABOUT THE CASE

FULL DIGITAL POSTERIOR SOLUTIONS WITH NON-HEX TI-BASES

PROF. DR. OĞUZ OZAN

DR. İBRAHİM UFUK ATEŞ

BACK TO SUMMARY

NUVO ConicalFIT™ Implant System

NUVO ConicalFIT™
Implant Scanbody NP

NUVO ConicalFIT™
Ti-Base Abutment NP

OVERVIEW

Patient

Female, 59 years of age with no any sign of systemic disease.

Anamnesis And Clinical Examination

Pain killers during her migraine attacks.

Clinical Examination

Healthy, non-smoking female who has large span missing tooth area in mandibular lower left side. Neighboring teeth has poor amalgam restoration. The angulation of the neighboring molar teeth due to the missing area that is not restorated in the past 10 years.

Treatment Plan

- CT examination
- Implant placement in the #35 and #36 area
- Restorations with the monolithic zirconia crowns supported by non-hex NUVO ConicalFIT ™ Ti-bases.
- Post-operative check at 1-year follow-up

Radiographs

Due to terminal dentition in the lower jaw, two NUVO ConicalFIT™ implants were planned for placement in the lower left edentulous area.

Surgery Phase

Augmentin 1000 mg (2 x 1) was prescribed 24 hours prior to the surgery. Surgery was proceeded in January 2023. Local infiltration anesthesia with Ultracain D-S Fort (Articain/epinefrine) 2 x 1.7 ml. Full thickness flap was elevated from the bone crest on the line of the attached gingiva. NUVO ConicalFIT™ 3.75 x 11mm on the 35 position, NUVO ConicalFIT™ 3.5 x 11mm on the 36 position were drilled and placed in the same time. Initial torque values were recorded and all of them were over 60 N.cm. After placing the implants in the planned position, healing abutments were placed and flap closure was achieved with 4-0 PGA (polyglicolic asid) suture.

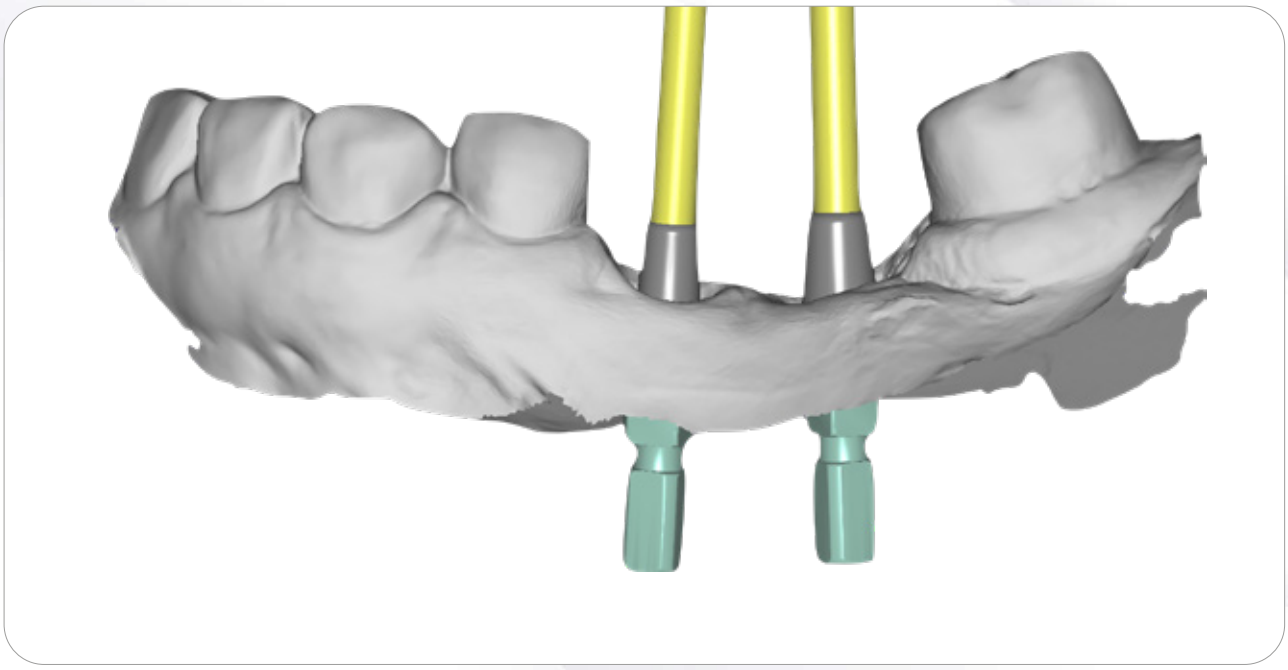
Prosthetic Phase

After the desired osseointegration period of two months, the healing abutments were removed and digital impression copings were placed on the implants. A full digital impression was taken using an intraoral scanner (IOS). The scan data was then transferred to the design software, where the prosthetic bridge was designed using the appropriate Ti-base of the NUVO ConicalFIT™ system. The final prosthesis was screwed in place, occlusion was checked and adjusted, and the patient was scheduled for a routine follow-up appointment.

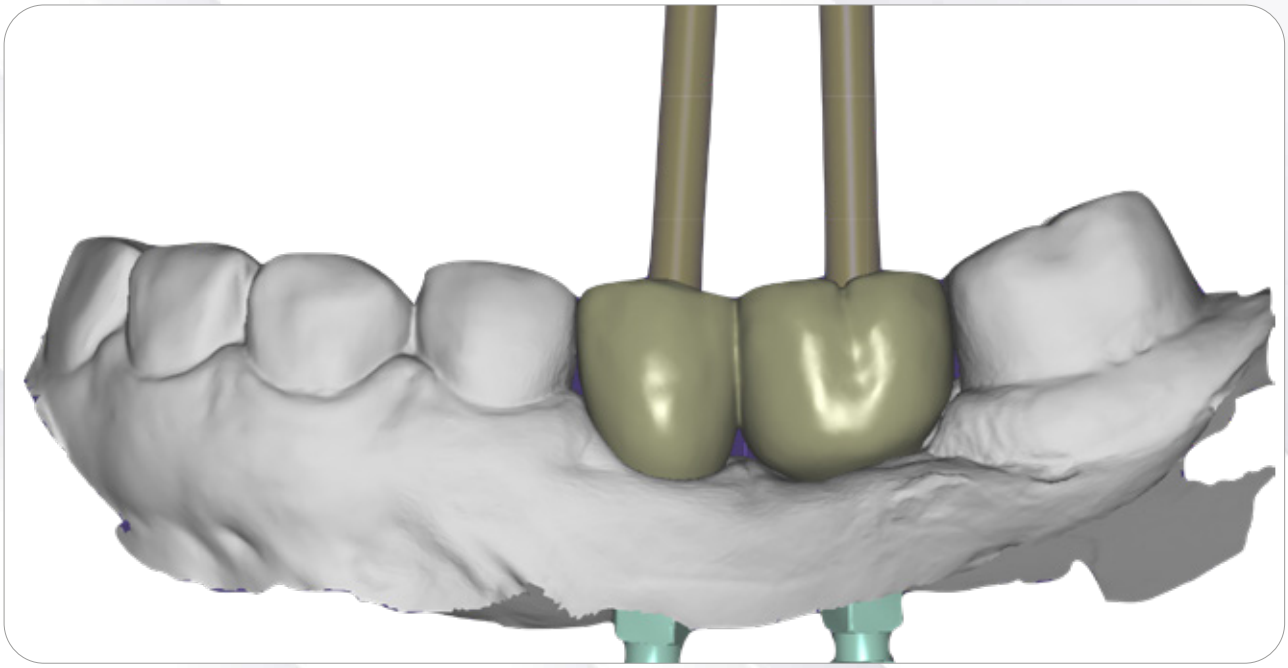
Initial radiograph of the patient

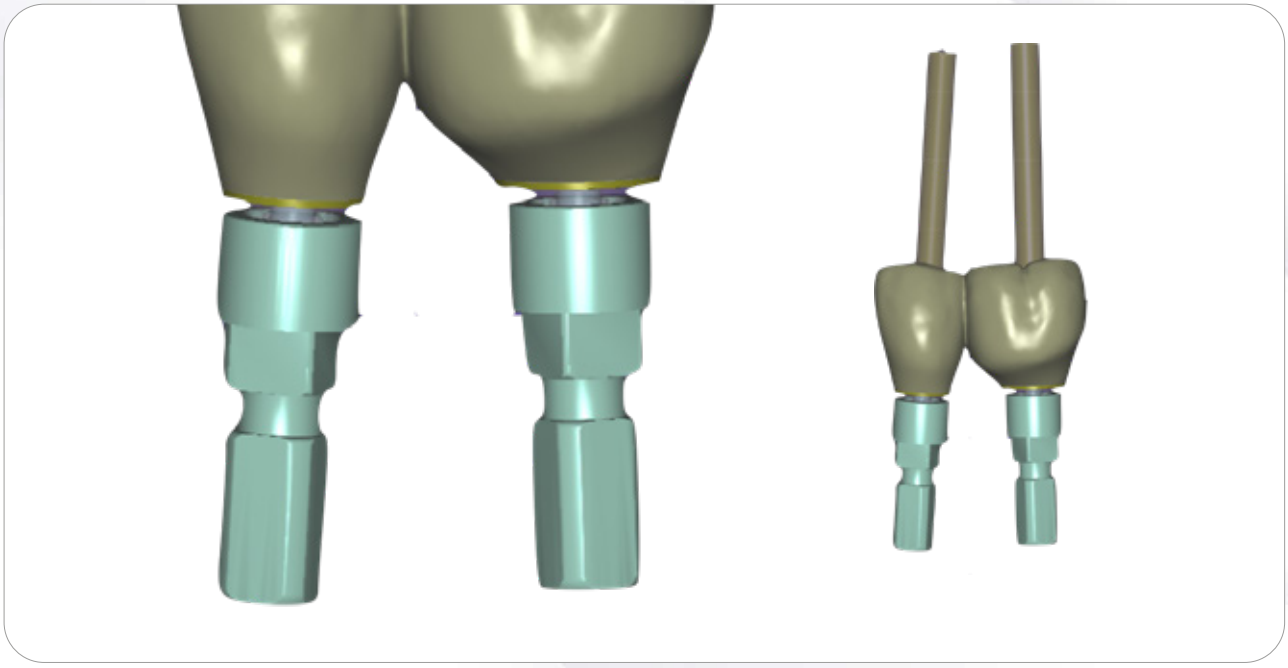
Digital impression posts in place

Intraoral scans of the patient



Computer aided design of the definitive prosthesis of the patient





Computer aided design of the definitive prosthesis of the patient

Production steps of the monolithic zirconia restorations

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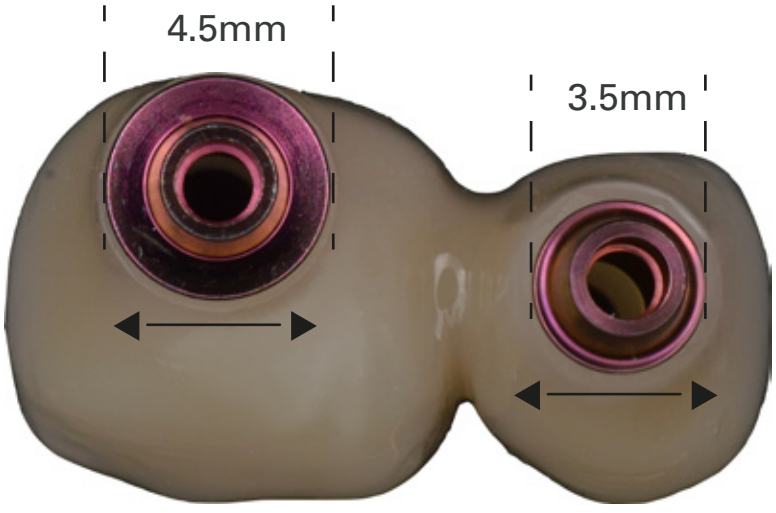
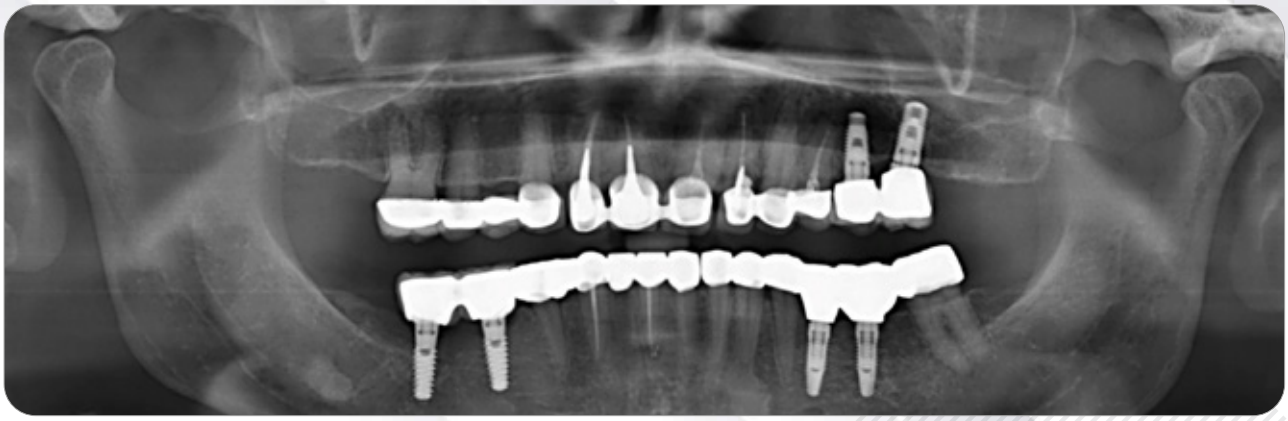
Cementation of the NUVO ConicalFIT™ Ti-bases

Selection of the different Ti-bases for different areas



Screw-retained restoration of the patient in place

Closing steps of the screw access holes



Final radiograph of the patient

TESTIMONIAL

PROF. DR.
OĞUZ OZAN

DR. İBRAHİM
UFUK ATEŞ

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Professional opinion of the product and procedure, focusing on your learning from the case.

In this case we used non-hex Ti-bases of the narrow platform (NP) NUVO ConicalFIT™. The diameter options of the Ti-bases have a great advantage while using them in the molar, premolar and incisal regions. Since, molar regions frequently require large diameter abutments on the other hand, premolar and incisal regions may need narrow diameter abutments.

What are the challenges during treatment and how were they resolved?

Using the narrow diameter implants in the molar region may be problematic when creating the desired prosthetic contour for a molar crown. We solved this issue by using the large diameter non-hex Ti-bases option of the NP platform of NUVO ConicalFIT™.

CYPRUS

FULL DIGITAL POSTERIOR SOLUTIONS OF THE SUBCRESTAL INSERTED IMPLANTS

PROF. DR. OĞUZ OZAN

DR. İBRAHİM UFUK ATEŞ

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PROF. DR. OĞUZ OZAN

ABOUT THE CASE

FULL DIGITAL POSTERIOR SOLUTIONS OF THE SUBCRESTAL INSERTED IMPLANTS

DR. İBRAHİM UFUK ATEŞ

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NUVO ConicalFIT™ Implant System

NUVO ConicalFIT™
Ti-base Abutment NP

NUVO ConicalFIT™
Tapered Implant
3.75 x 11mm

OVERVIEW

Patient

Male, 52 years of age with no any sign of systemic disease.

Current Medications

No drug usage

Clinical Examination

A healthy, non-smoking male presented with a missing first molar in the lower left mandibular region. In his clinical anamnesis, he reported experiencing pain during function in his lower left second molar. Clinical examination revealed a vertical crack in his root canal-treated lower left second molar. He expressed a desire to restore the edentulous area with an implant supported bridge to improve chewing function on his left side.

Treatment Plan

- CT examination
- Implant placement in the #36 and #37 area
- Restorations with the monolithic zirconia crowns supported by non-hex NUVOConicalFIT™ Ti-bases.
- Post-operative check at 1-year follow-up

Radiographs

The patient presented with a terminal dentition in the lower jaw. Two NUVO ConicalFIT™ implants were planned for the edentulous area on the lower left side.

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Surgery Phase

Augmentin 1000 mg was administered at a dosage of 2 × 1 daily, beginning 24 hours prior to the surgical procedure. The surgery was performed in January 2023 under local infiltration anesthesia using Ultracain D-S Forte (articaine with epinephrine), with two 1.7 ml cartridges.

A full-thickness mucoperiosteal flap was elevated from the crestal bone along the attached gingiva. Two implant sites were prepared and implants were placed simultaneously:

Position #36: NUVO ConicalFIT™ , 5.0 mm × 11.5 mm

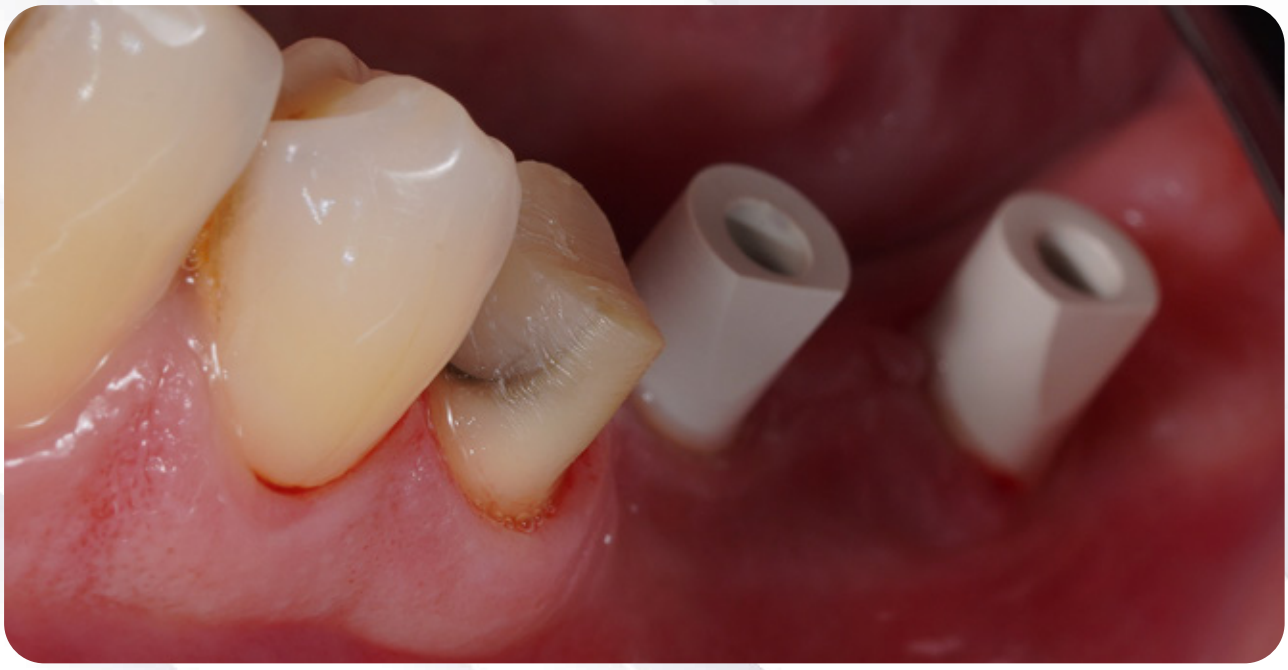
Position #37: NUVO ConicalFIT™ , 5.0 mm × 11.5 mm

Both implants achieved initial insertion torque values exceeding 35 N.cm, indicating good primary stability. Healing abutments were placed immediately, and the flap was sutured using 4-0 polyglycolic acid (PGA) sutures.

Prosthetic Phase

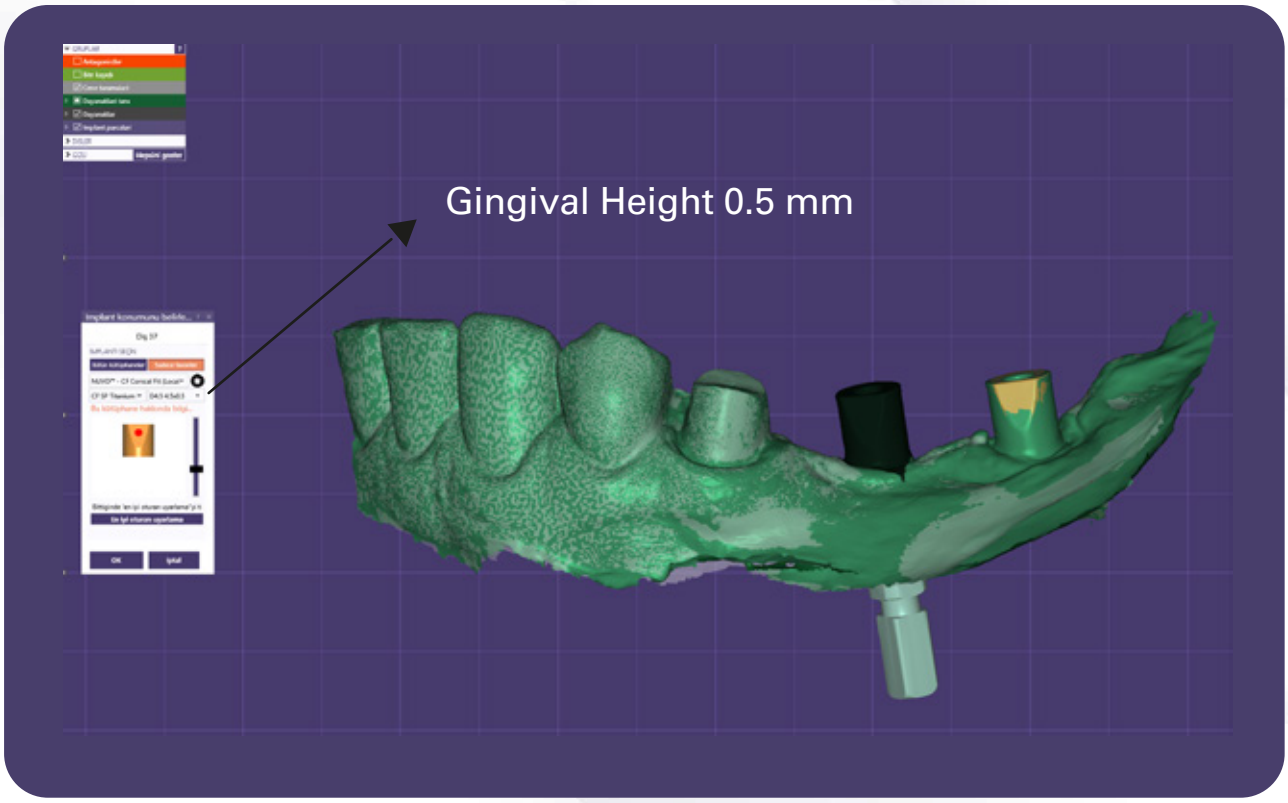
After the desired osseointegration period of two months, the long healing abutments, which shared the same geometry as the 3 mm non-hex NUVO Ti-bases, were removed. A full digital impression was taken using an intraoral scanner (IOS) and appropriate scan bodies. The scan data was transferred to the CAD software, where the bridge was designed based on the corresponding NUVO ConicalFIT™ Ti-base. The final prosthesis was screwed in place, occlusal contacts were adjusted, and the patient was scheduled for a routine follow-up appointment.

Tissue healing after 2 months

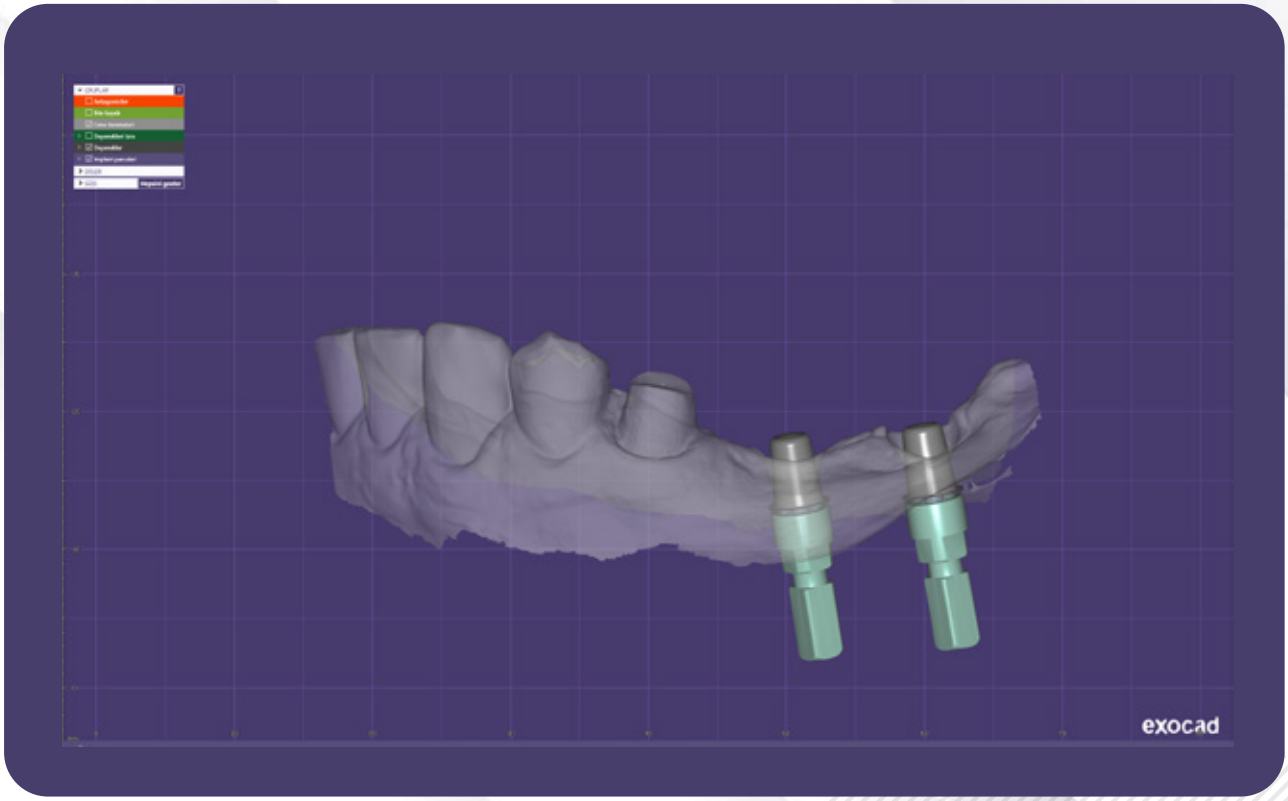


Digital impression posts in place

Intraoral scans of the patient



Trying the different Ti-base options from the NUVO ConicalFIT™ digital library for the deeply paced implants in the design software



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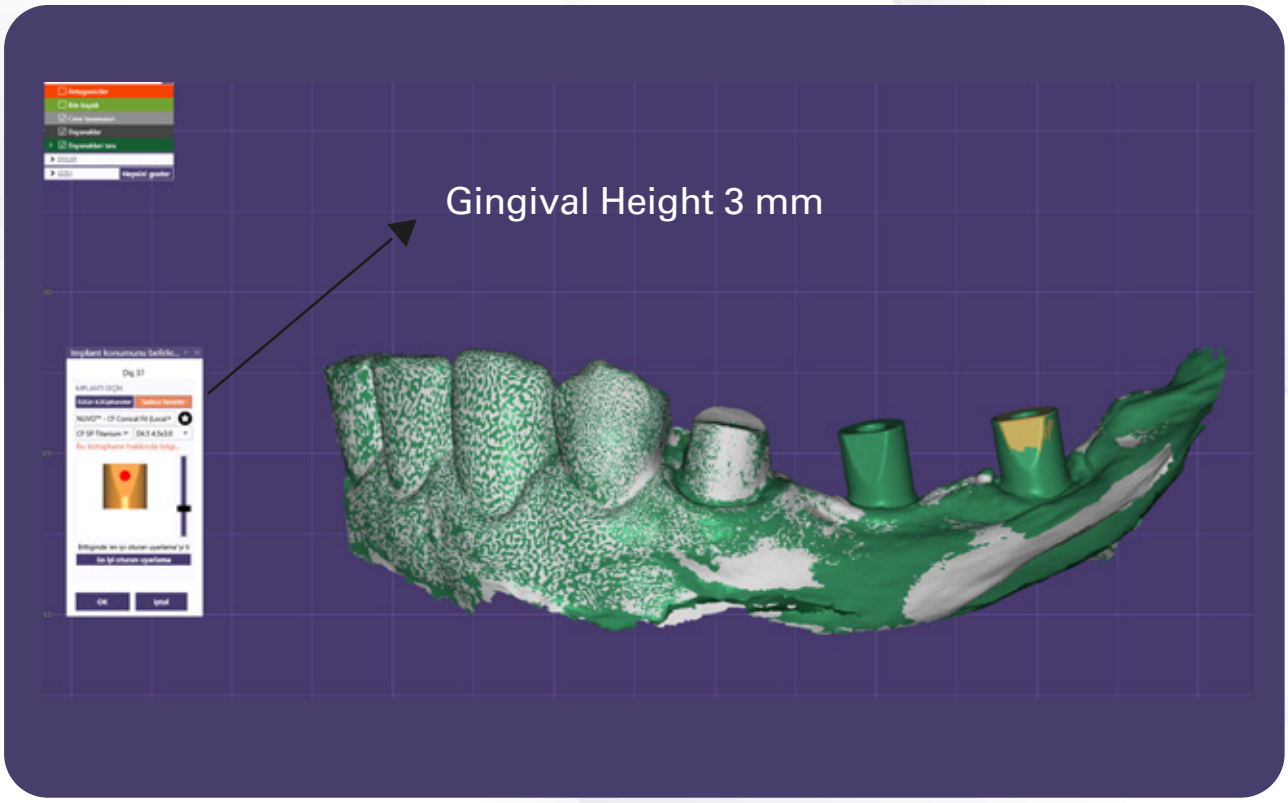
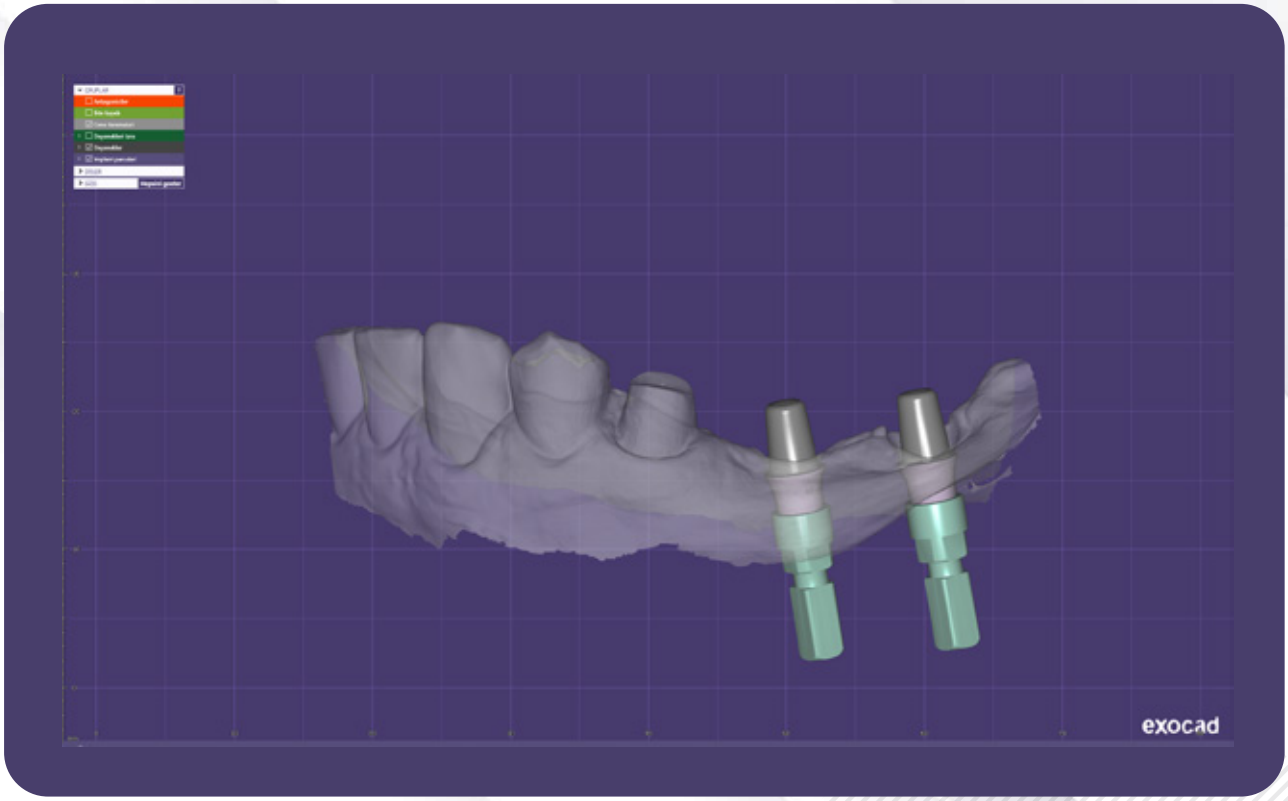


Trying the different Ti-base options from the NUVO ConicalFIT™ digital library for the deeply paced implants in the design software



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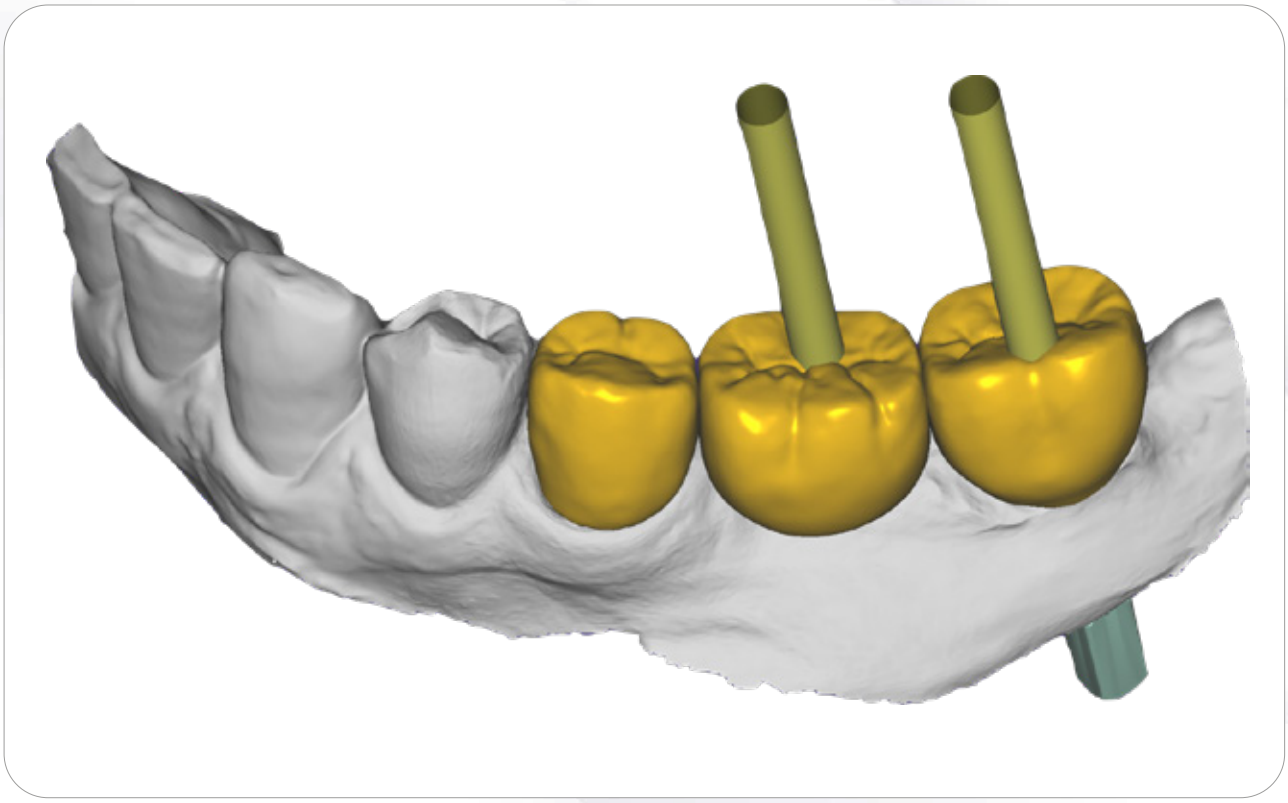
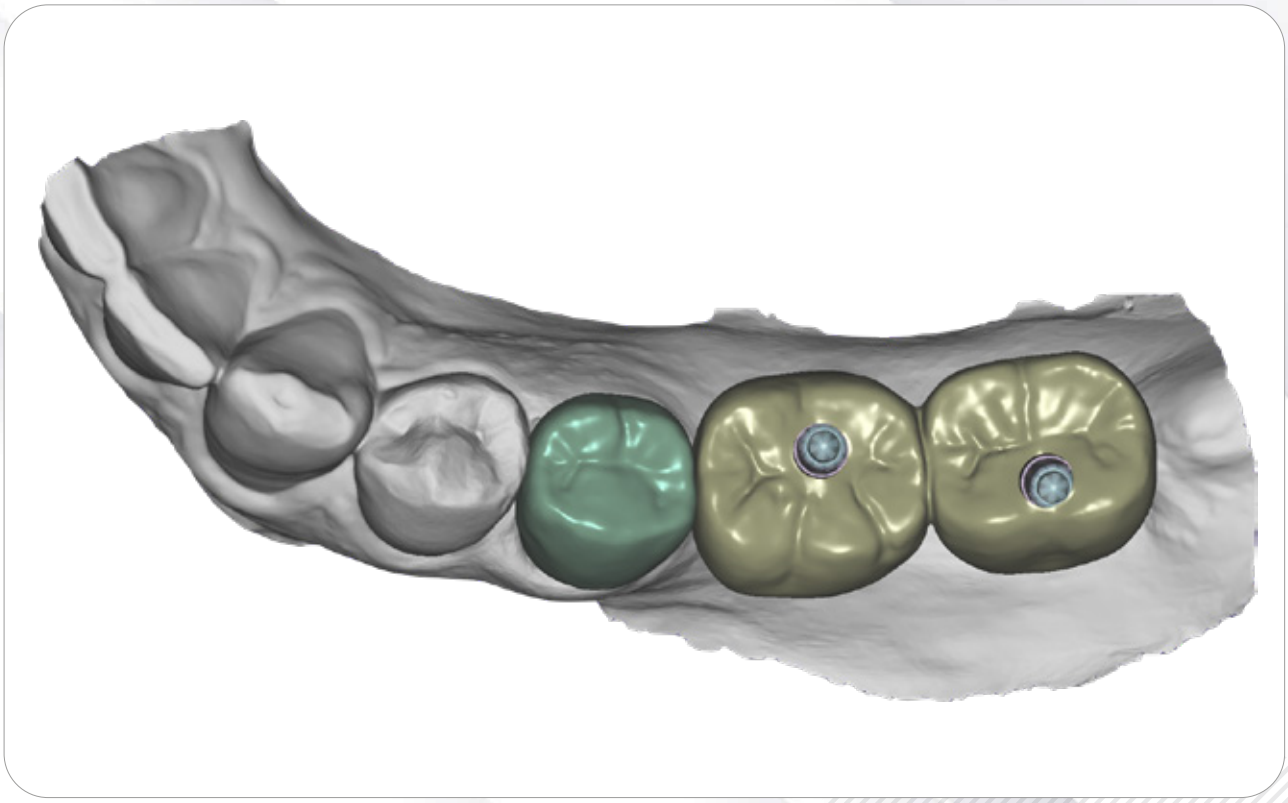
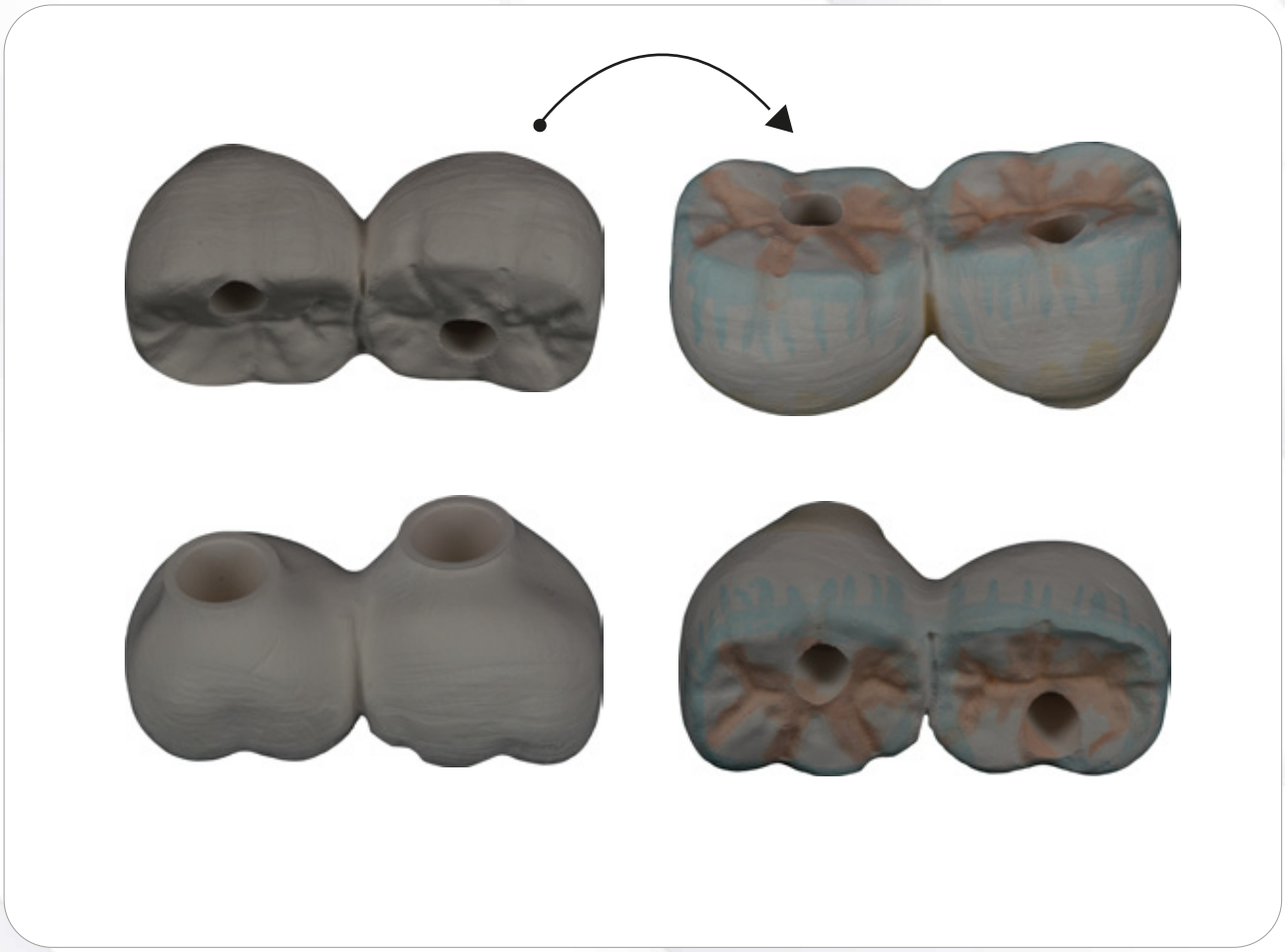


Computer aided design of the definitive prosthesis of the patient

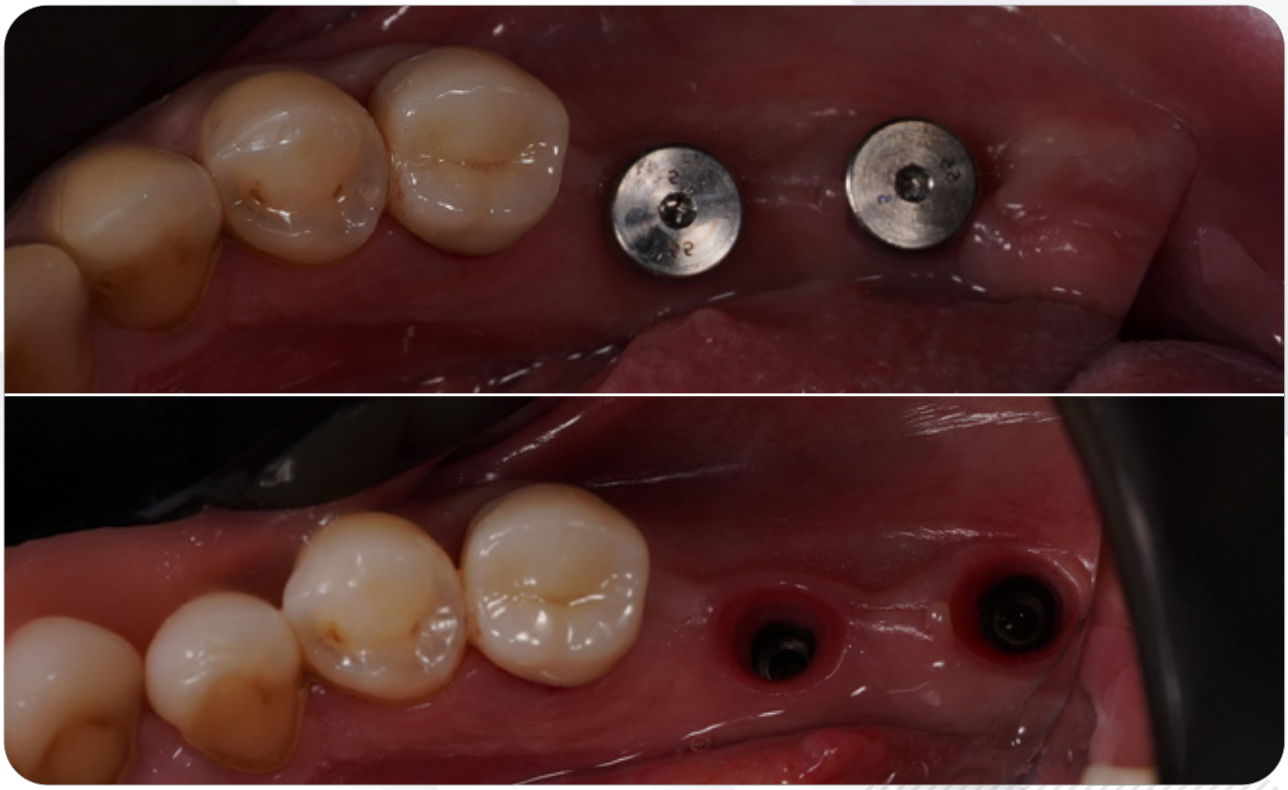




Production steps of the monolithic zirconia restorations

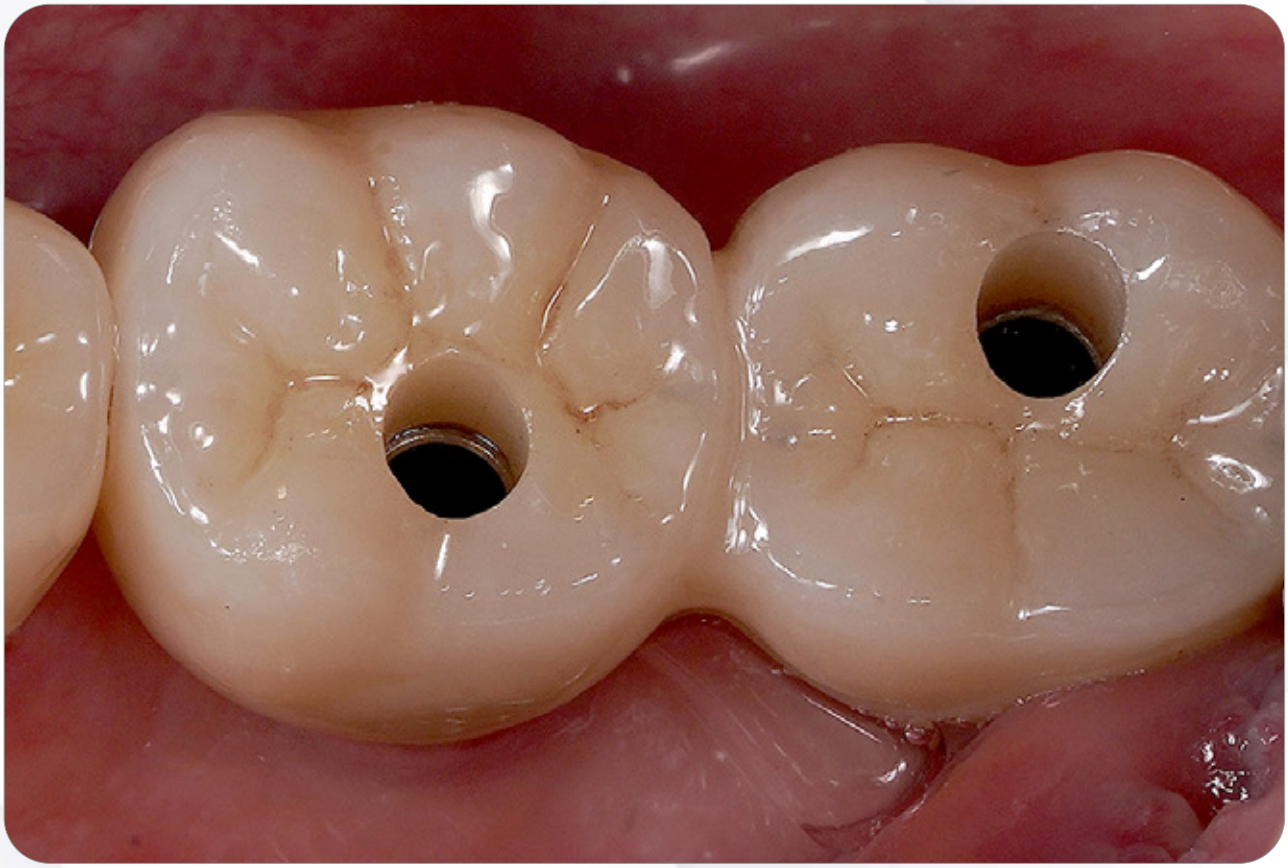
Cementation of the NUVO ConicalFIT™ Ti-bases

Similar geometry of the prosthetic abutments (Non-HexTi-bases) with the selected healing abutments



Tissue healing after 2 months

Screw-retainted restoration of the patient in place



Closing steps of the screw access holes

Final radiograph of the patient

TESTIMONIAL

PROF. DR.
OĞUZ OZAN

DR. İBRAHİM
UFUK ATEŞ

Professional opinion of the product and procedure, focusing on your learning from the case

Different healing abutment options that can mimic the geometry NUVO ConicalFIT™ Ti-bases has a great advantage while treating the molar area. Creating a good emergence profile can increase the long-term stability of the soft tissue around the implants.

What are the challenges during treatment and how were they resolved?

Achieving a desired emergence profile in the deeply inserted implants may be problematic in some of the cases. Using the long healing abutments which has the same geometry with the long gingival height non-hex Ti-bases of the NUVO ConicalFIT™ is a very good solution for these kinds of subcrestal placed implant cases.

RESTORING THE AESTHETIC ZONE: IMMEDIATE IMPLANTS AND LOADING AFTER MULTIPLE EXTRACTIONS

BRAZIL

DR. MAURO GEBRAN

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DR. MAURO GEBRAN

ABOUT THE CASE

RESTORING THE AESTHETIC ZONE: IMMEDIATE IMPLANTS AND LOADING AFTER MULTIPLE EXTRACTIONS

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NUVO ConicalFIT™ Implant System

NUVO ConicalFIT™
Multi Unit Abutment
Angled NP

NUVO ConicalFIT™
Tapered Implant
3.5 x 13mm

Anamnesis and Clinical Examination

The patient is a 37-year-old male with no current systemic health issues. He is a recovered substance abuser who had lost all of his teeth as a result of previous substance use. The treatment plan included the extraction of all remaining teeth and the removal of several existing implants exhibiting bone loss. A full-arch rehabilitation was planned, consisting of an immediate loading protocol for the lower jaw and a delayed loading protocol for the upper jaw.

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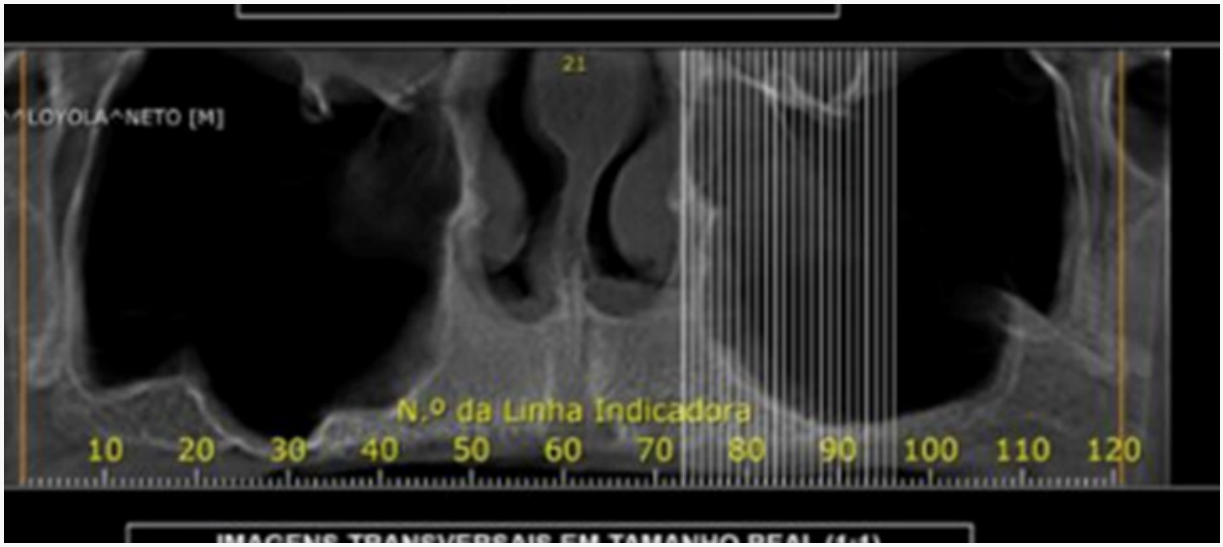
Radiographs



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Surgery Phase

No preoperative medication was administered initially. Local infiltration anesthesia using Articaine was applied. Tooth extraction was performed using a periotome and anterior forceps.

For the second stage of treatment, premedication was administered. The procedure began with the mandible under an anesthetic block. All remaining mandibular teeth were extracted, and NUVO ConicalFIT™ 3.5 × 11.5 mm implants were placed. Multi-unit abutments and impression posts were connected, and a multifunctional lower surgical guide was utilized to determine vertical dimension, occlusion, and implant positioning.

Impression posts were splinted using GC Pattern Resin, and impressions were taken using a combination of light- and heavy-body putty materials. In the initial phase, a temporary upper denture was fabricated and delivered.

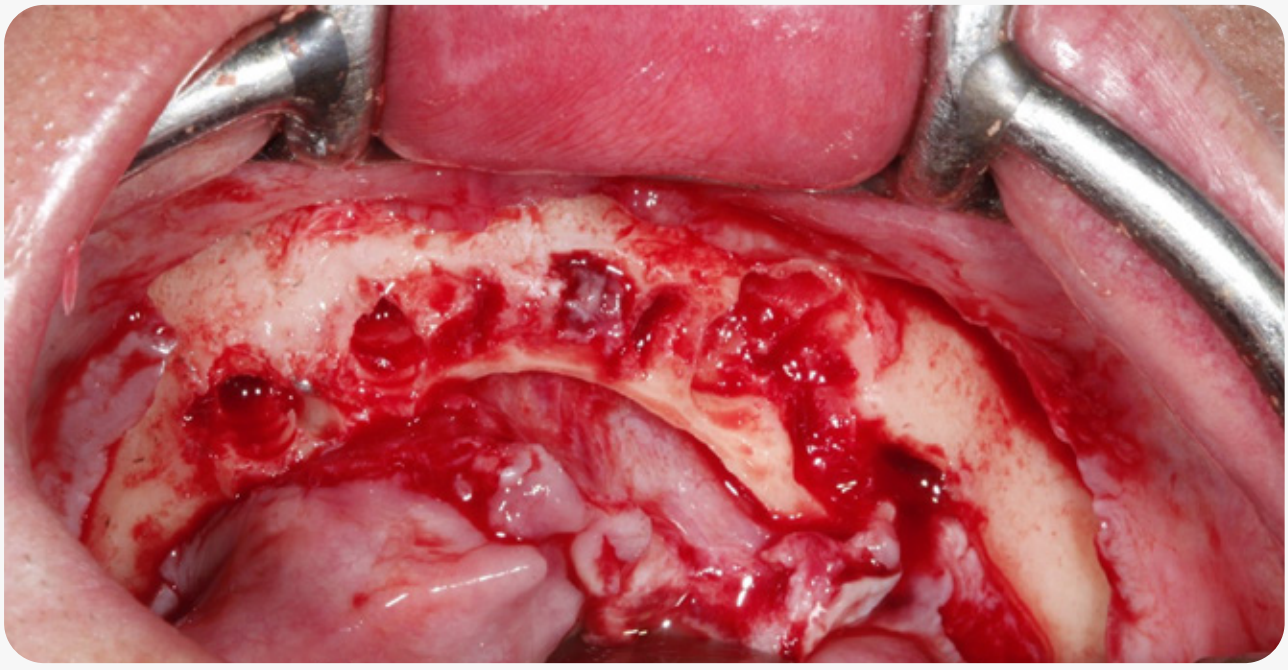
Three months later, in the second phase, four implants were placed in the maxilla using the all-on-4 technique with NUVO ConicalFIT™ 3.5 × 13 mm implants. Cover screws were placed over the implants to allow for undisturbed healing.

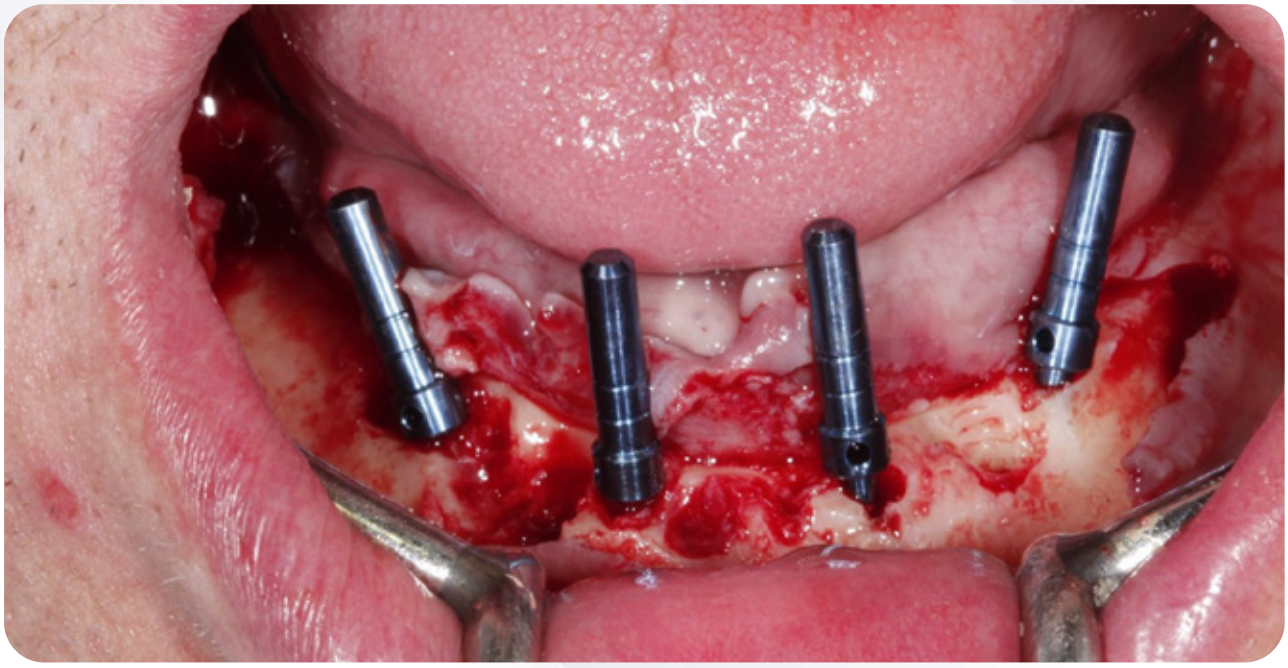
After a three-month osseointegration period, the maxillary implants were uncovered, and multi-unit abutments were connected. The upper full-arch prosthetic protocol was then initiated.

Clinical situation on the first appointment

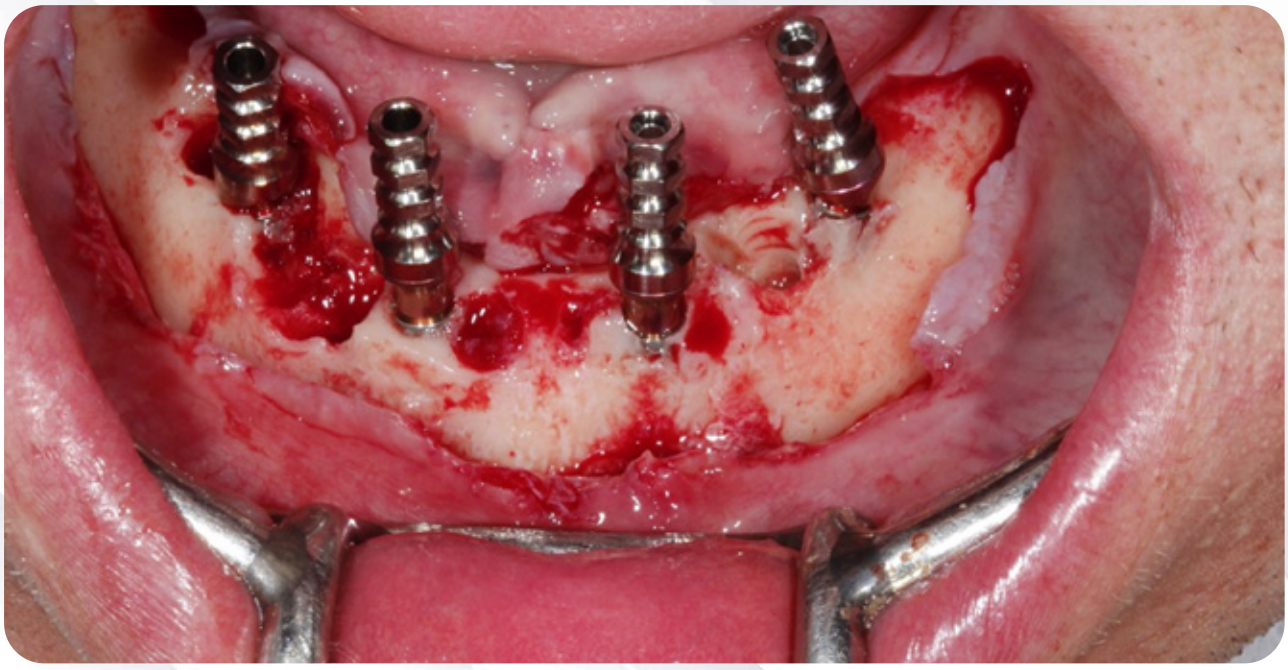
Initial photo

After all the extractions and implants removal





The osteotomy and checking the positioning of the implants

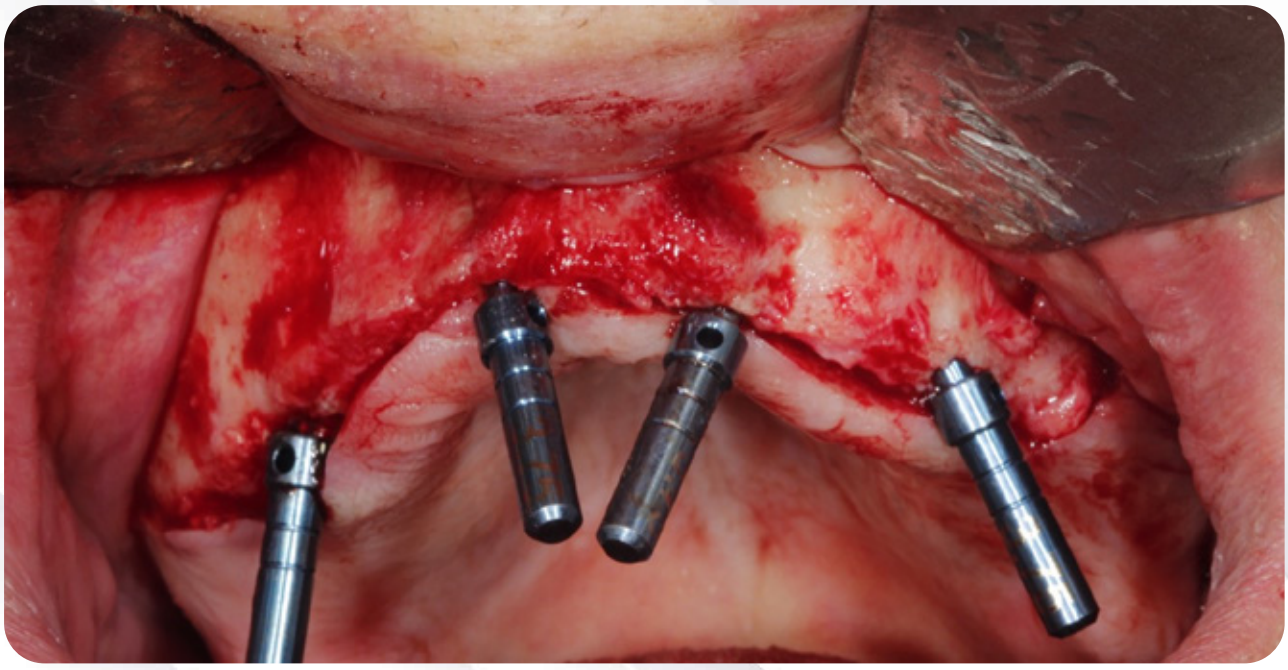


Multi-unit abutments with impression posts

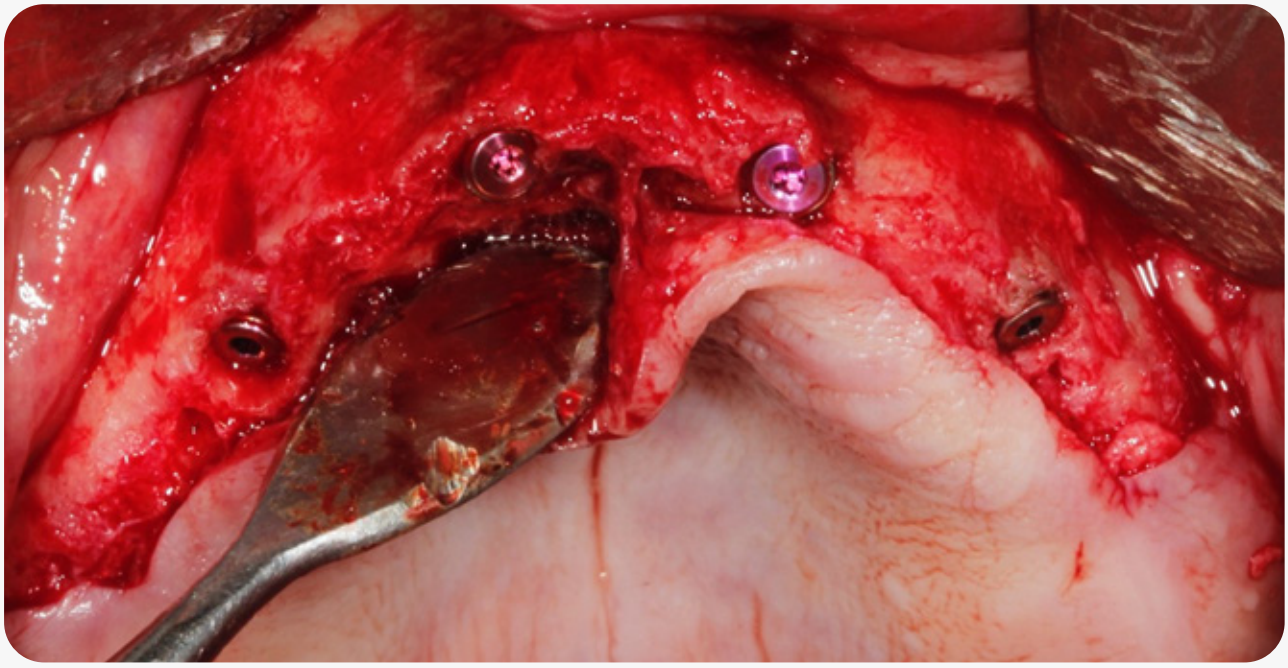
Fixation of the multi-functional guide on the impression posts and impression

Immediate inferior prothesis and a temporary denture in the top

Second phase: 3 months after the inferior protocol was installed



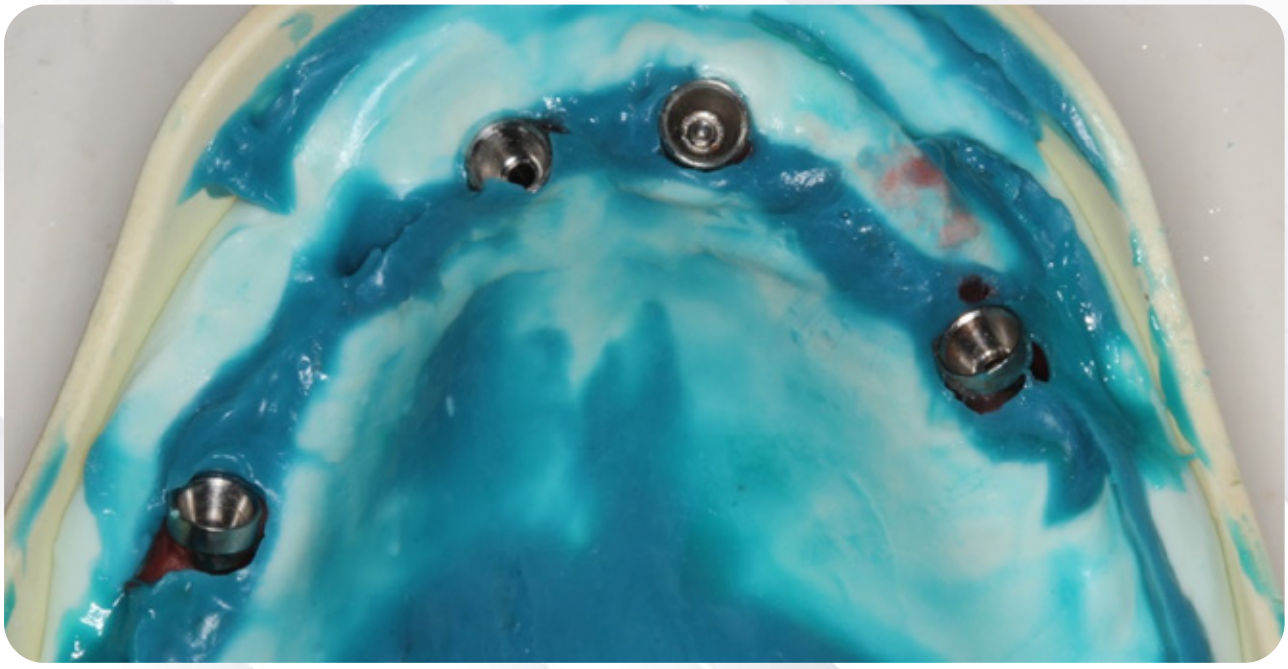
The initial osteotomy and all-on-4 technique



Implants and cover screw

Suture phase

3rd Phase: Re-entry procedure
Re-entry procedure was performed to uncover the implants, and multi-unit abutments were subsequently placed



Taking the impression

DR. MAURO GEBRAN

TESTIMONIAL

Professional opinion of the product and procedure, focusing on your learning from the case.

This product is highly effective for complex cases, and it allowed me to significantly improve this patient's quality of life. Its excellent macrogeometry enabled immediate loading in the mandible and facilitated a successful upper full-arch protocol prosthesis in the following phase.

What are the challenges during treatment and how were they resolved ?

The most challenging aspect of this case was treating an exceptionally young patient in need of a life-changing solution to restore self-esteem and achieve a better quality of life.

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MULTIPLE EXTRACTIONS IN THE AESTHETIC ZONE WITH IMPLANTS PLACEMENT AND IMMEDIATE LOADING

BRAZIL

DR. MAURO GEBRAN

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DR. MAURO GEBRAN

ABOUT THE CASE

MULTIPLE EXTRACTIONS IN THE AESTHETIC ZONE WITH IMPLANTS PLACEMENT AND IMMEDIATE LOADING

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NUVO ConicalFIT™ Implant System

NUVO ConicalFIT™
Multi Unit Abutment
Straight 4.8 NP

NUVO ConicalFIT™
Tapered Implant
3.5 x 13mm

Anamnesis and Clinical Examination

The patient is a young, healthy male and a professional saxophonist. He first noticed slight mobility in his anterior teeth approximately five years ago. Radiographic examination revealed early signs of bone loss. I suspect that repeated trauma from playing his instrument may have contributed to this condition.

Initially, we pursued periodontal treatment to manage the situation. However, over the course of a few years, tooth mobility worsened.

As a result, we made the decision to extract teeth #12, #11, #21, and #22. Two implants were placed immediately, followed by immediate loading with a temporary bridge.

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Radiographs

X-ray before the surgery

Surgery Phase

No preoperative medication was administered. Local infiltration anesthesia was applied using Articaine. Tooth extractions were performed using a periotome and anterior forceps. Following the extractions, the sockets were thoroughly debrided with a curette, and osteotomies were initiated with the surgical drills.

Since the implants needed to be placed 2 mm apical to the socket level, a buccal approach with palatal positioning was employed. Two NUVO ConicalFIT™ 3.5 × 13 mm implants were placed, achieving a primary stability of 60 N·cm in both sites. Based on this excellent torque value, we proceeded with immediate loading.

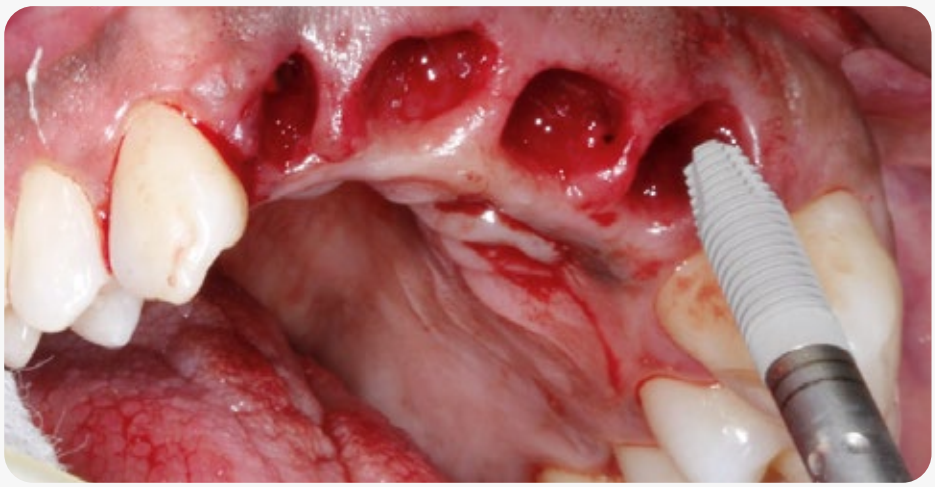
Multi-unit abutments for narrow implants (3 mm height) were selected. Impression transfers were placed and splinted together using GC Pattern Resin. An open-tray impression was taken using regular body silicone putty. On the same day, an acrylic provisional bridge was fabricated and delivered.

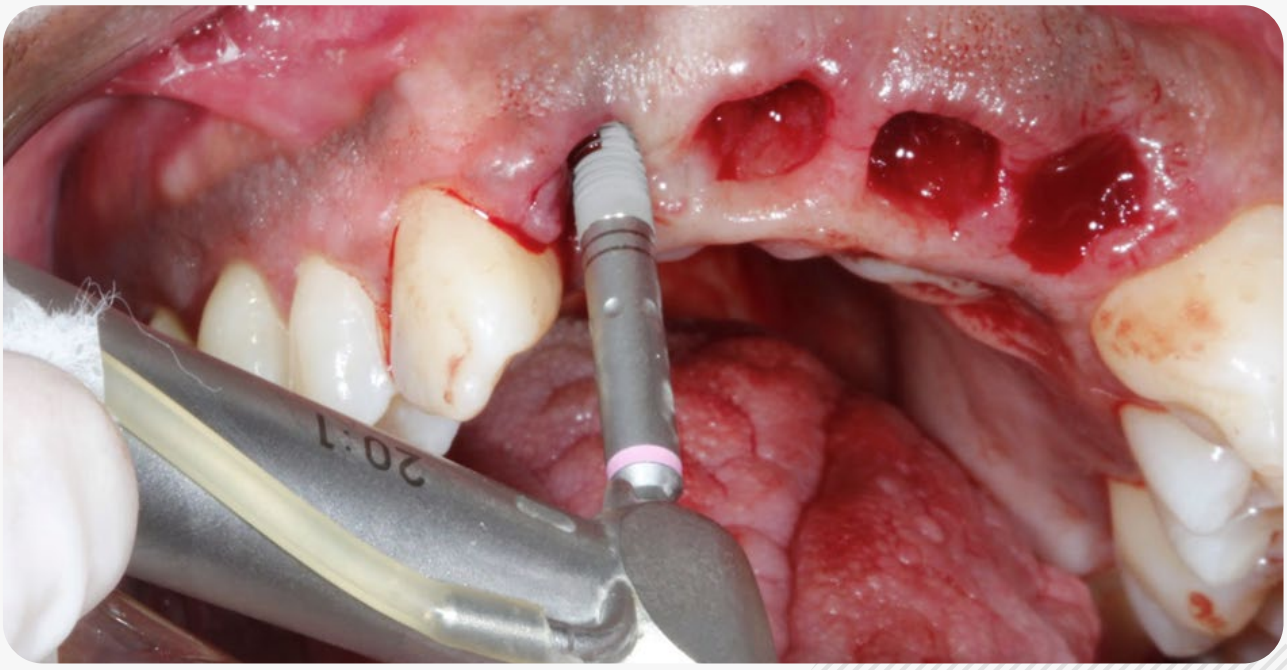
For postoperative management, the patient was prescribed ibuprofen 600 mg for three days as needed.

Initial photo

Extractions and probing to measure the socket

Buccal approach

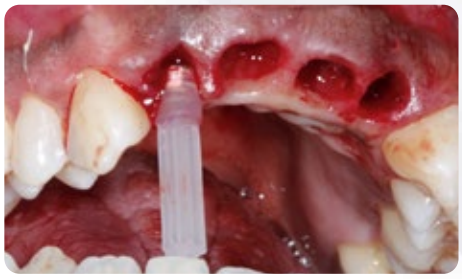


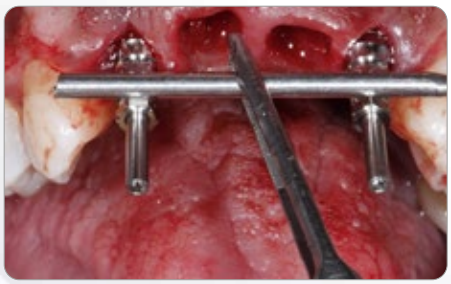


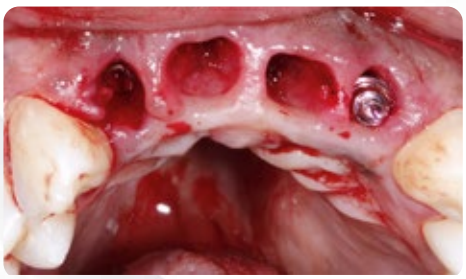
Placement of implants

Measuring the torque

Placing the multi-unit abutments







Final

DR. MAURO GEBRAN

TESTIMONIAL

Professional opinion of the product and procedure, focusing on your learning from the case

My experience with the system has been very positive. The thread design and tapered shape provided excellent primary stability, enabling immediate loading and a favorable aesthetic outcome. The patient was pleased to leave with fixed provisionals and even resumed playing the saxophone within the same week.

For immediate placement and loading- especially in the anterior region- I recommend a buccal approach. Avoid following the socket axis to ensure proper positioning. In this case, we sealed the socket with the provisional crown, without using graft material, allowing the restoration to guide natural bone regeneration.

What are the challenges during treatment and how were they resolved?

The primary challenge in such cases is ensuring the patient leaves with a functional provisional restoration. Therefore, avoid promising immediate loading before clinical assessment. Focus on ideal implant positioning—engage the palatal bone by placing implants slightly palatal to the socket. Without this support, immediate loading may not be feasible.

CROATIA

FULL-ARCH REHABILITATION WITH NUVO CONICALFIT™ IMPLANT SYSTEM

DR. BERISLAV MOSTARAC

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DR. BERISLAV MOSTARAC

ABOUT THE CASE

FULL-ARCH REHABILITATION WITH NUVO CONICALFIT™ IMPLANT SYSTEM

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NUVO ConicalFIT™ Implant System

NUVO ConicalFIT™
Tapered Implant
4.0 x 11.5mm

NUVO ConicalFIT™
Multi Unit Abutment
Angled NP

NUVO ConicalFIT™
Titanium Coping
Multi Unit Abutment 4.8

BACK TO SUMMARY

Anamnesis and Clinical Examination

The patient was fully edentulous. Her lower teeth had been extracted six months prior. She was wearing a mobile acrylic prosthesis in the lower jaw and had four implants supporting an AFM prosthesis in the upper jaw. Her main complaint was: “The mobile prosthesis in my lower jaw irritates me.”

The patient was in good general health, with no systemic diseases and no surgical risk factors. Her dental history included well-controlled periodontitis, good oral hygiene, and a thick soft tissue biotype.

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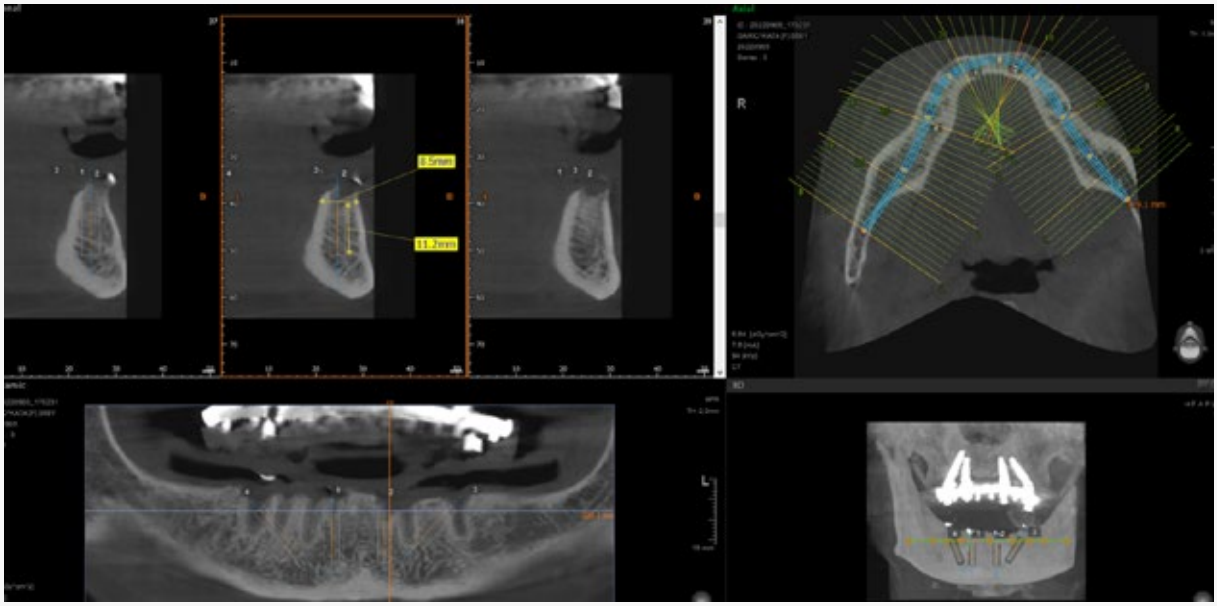
BACK TO SUMMARY

Planning

1. CBCT examination



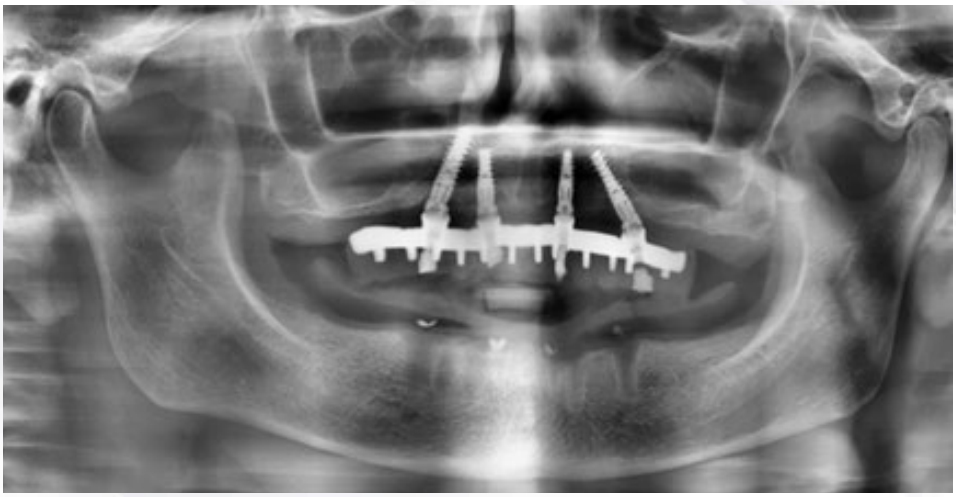
2. Oral hygiene instructions were provided, with a focus on cleaning techniques and bacterial control in the upper jaw.

3. Implants were placed in positions #45, #42, #32, and #35.

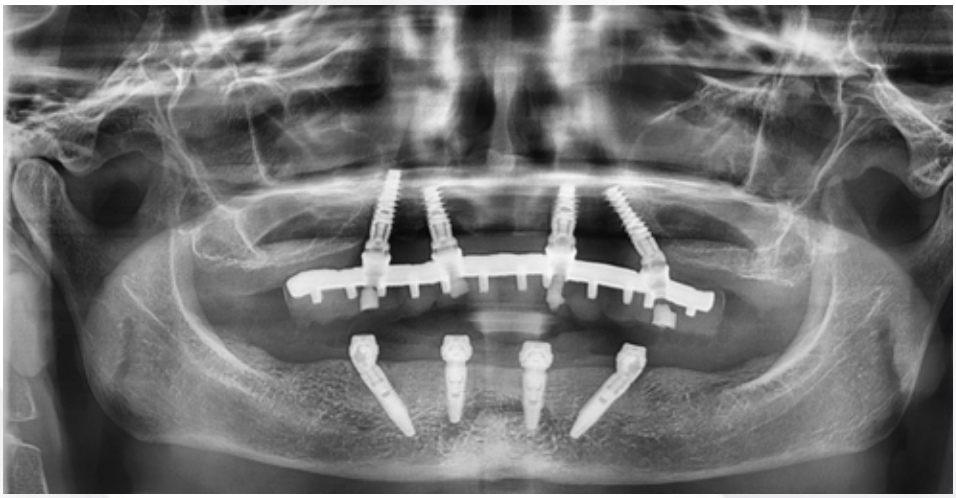
4. The mandibular arch was immediately loaded with four NUVO ConicalFIT™ implants using multi-unit abutments (MUAs) and temporary abutments. A full-arch acrylic provisional prosthesis was delivered.

5. Six months after implant placement, the lower jaw was restored with a definitive zirconia bridge.

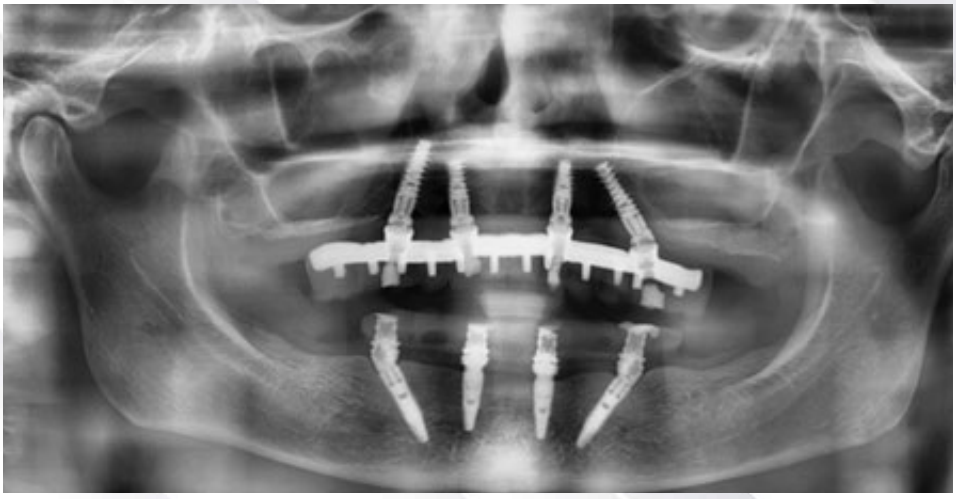
Radiographs



Mobile prosthesis with markers (planned implant positions)



Healing abutments were placed immediately following implant placement



A temporary acrylic prosthesis was delivered six months after implant placement

Surgery Protocol

Amoxiclav BID 1 g (2 × 1) was prescribed 24 hours prior to surgery. The procedure was performed in March 2023 under local infiltration anesthesia using 5 carpules of Ubistesin Forte (40 mg/ml articaine with 0.01 mg/ml epinephrine).

The patient's existing mobile prosthesis was modified into a fixed acrylic bridge. A full-thickness flap was elevated from the bone crest along the center of the attached keratinized mucosa. The alveolar ridge was horizontally leveled and flattened using a piezoelectric surgical device.

Osteotomies were prepared following the protocol for Type I bone, and NUVO ConicalFIT™ implants were placed as follows:

4.0 × 16 mm in position #45
4.0 × 11.5 mm in position #42
4.0 × 11.5 mm in position #32
4.0 × 16 mm in position #35

All implants achieved an initial torque value greater than 45 N.cm and were placed 1 mm subcrestally.

On the posterior sites (#45 and #35), 30-degree multi-unit abutments were selected and torqued to 32 N.cm. On the anterior sites (#42 and #32), straight (0-degree) standard multi-unit abutments were placed and torqued to 20 N.cm.

Healing abutments were connected following implant placement, and the surgical site was closed with 4-0 PGA (polyglycolic acid) sutures.

Prosthesis Protocol

The mobile prosthesis was prepared for connection to the temporary abutments using Futar D fast as the luting material. The prosthesis was sent to the dental laboratory for finishing.

Twenty-four hours after implant placement, the temporary prosthesis was connected to the multi-unit abutments with a torque of 10 N.cm. Occlusion was carefully checked. The patient was instructed to follow a soft diet and was given standard postoperative care instructions.

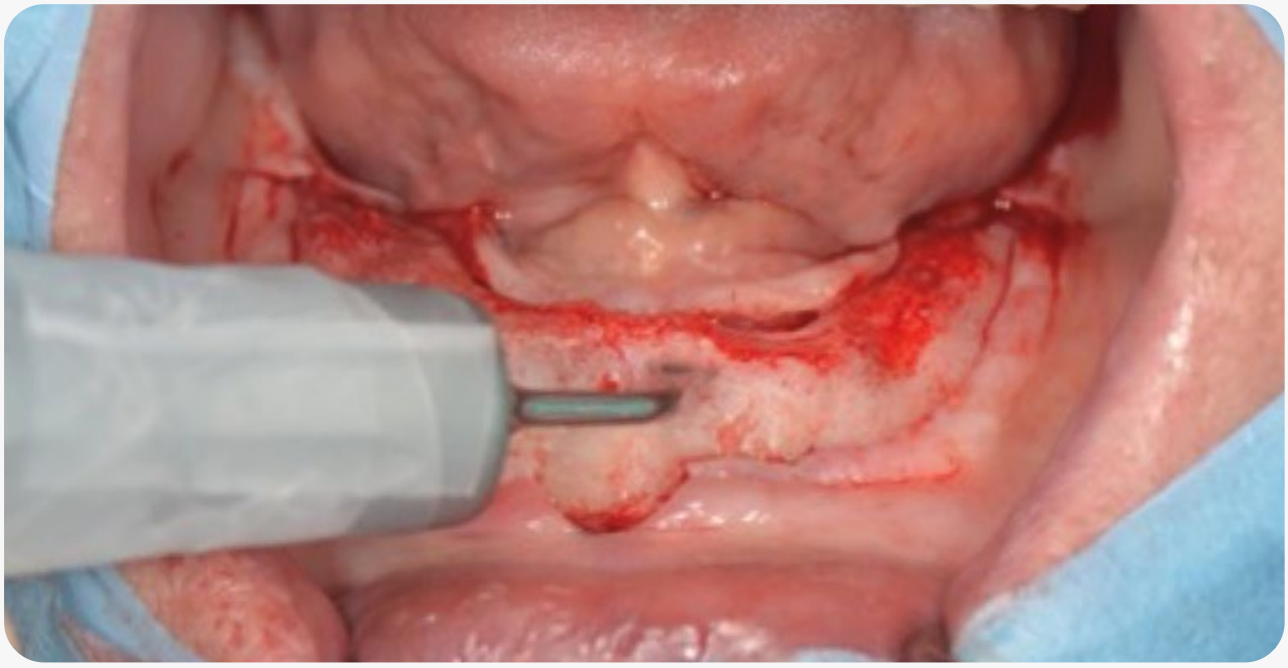
Six months later, the temporary prosthesis was removed for clinical and radiographic evaluation, including a panoramic X-ray. Impressions were taken using impression copings mounted on the MUAs, which were splinted together with acrylic resin to ensure accuracy. The final impression and bite registration were then sent to the dental laboratory for fabrication of the definitive prosthesis.

Stone models were prepared and digitized using a model scanner. The scanned data was processed in design software, and a zirconia bridge was designed, milled, individualized, and polished. Titanium copings were cemented into the zirconia bridge.

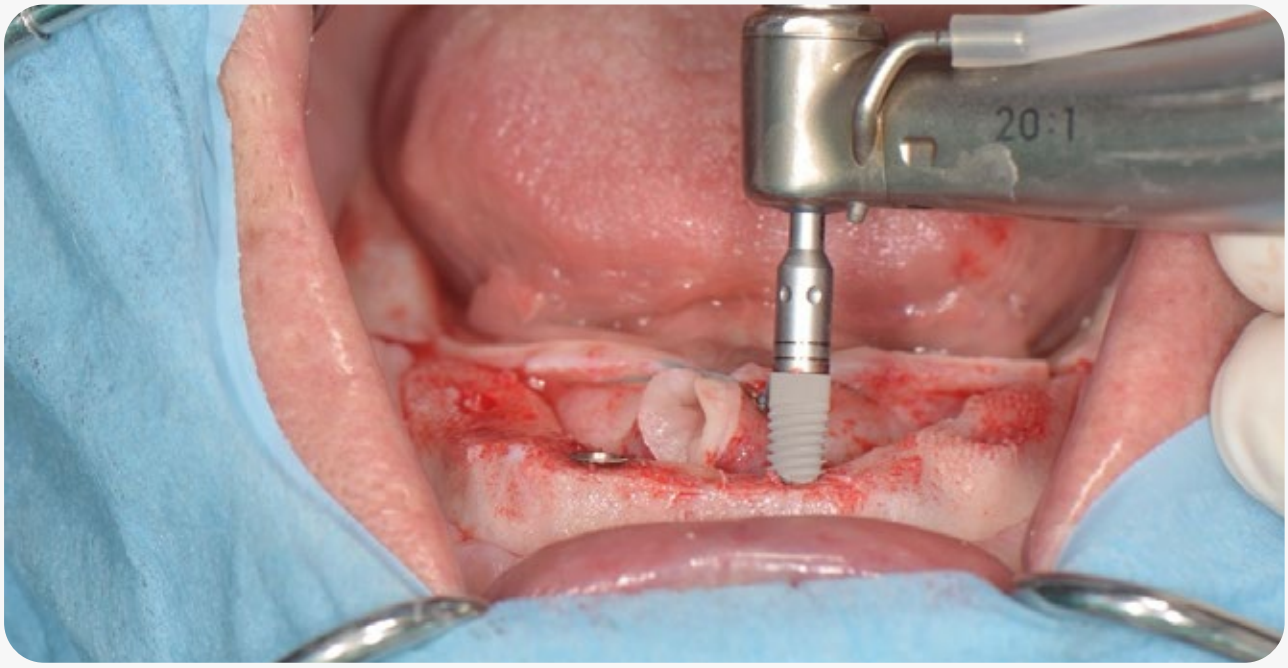
The final prosthesis was screwed into place, occlusion was checked and adjusted as needed, and a routine follow-up appointment was scheduled.

Initial situation: acrylic lower prosthesis, bite registration before surgery for proper occlusion after implant placement.

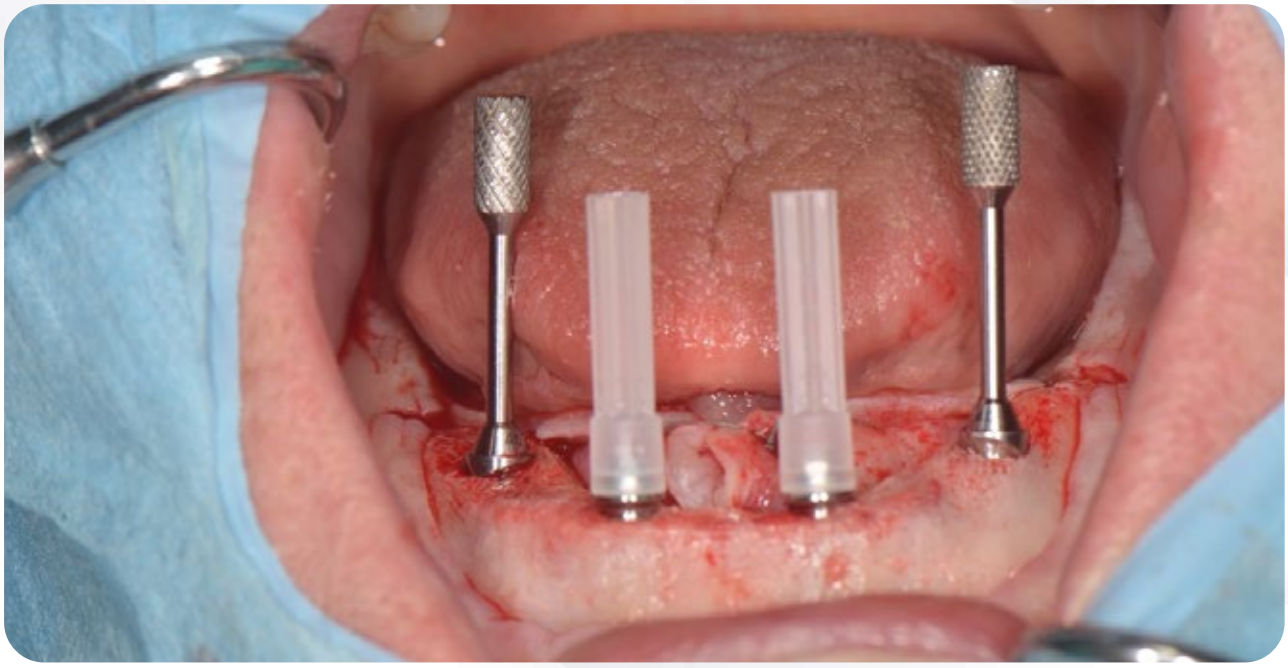
Wide alveolar ridge with thick tissue phenotype; incision designed accordingly for optimal flap management.



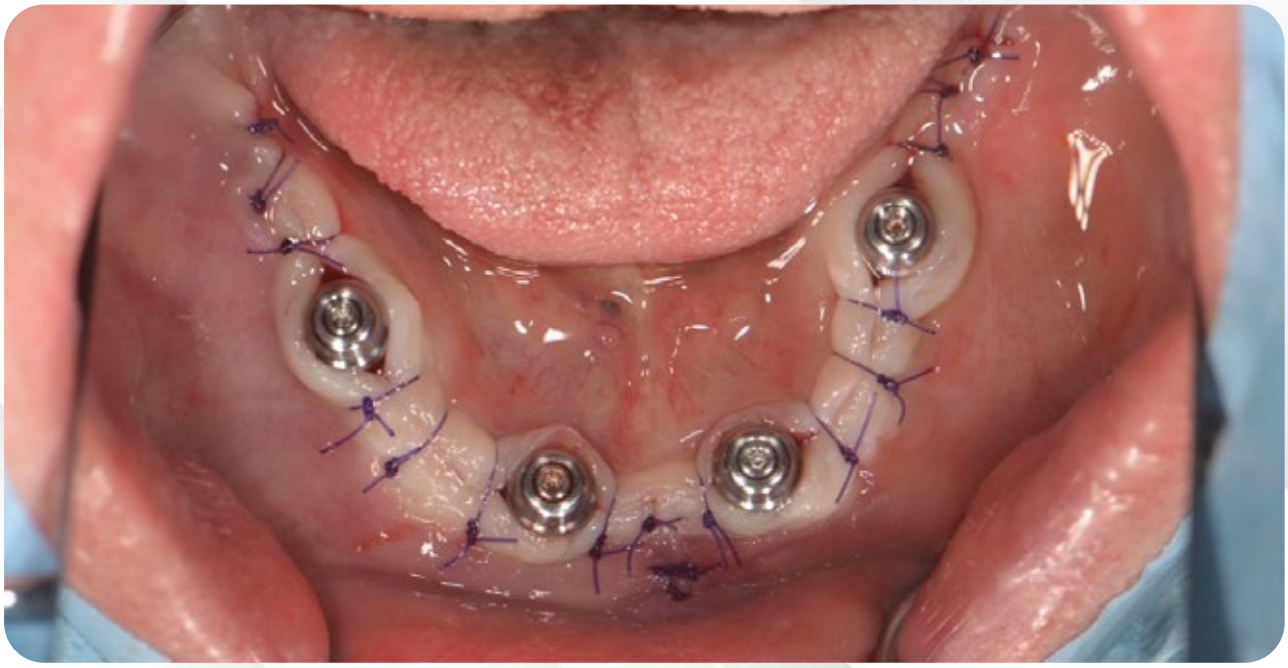
Horizontal plane leveled and flattened with piezo device



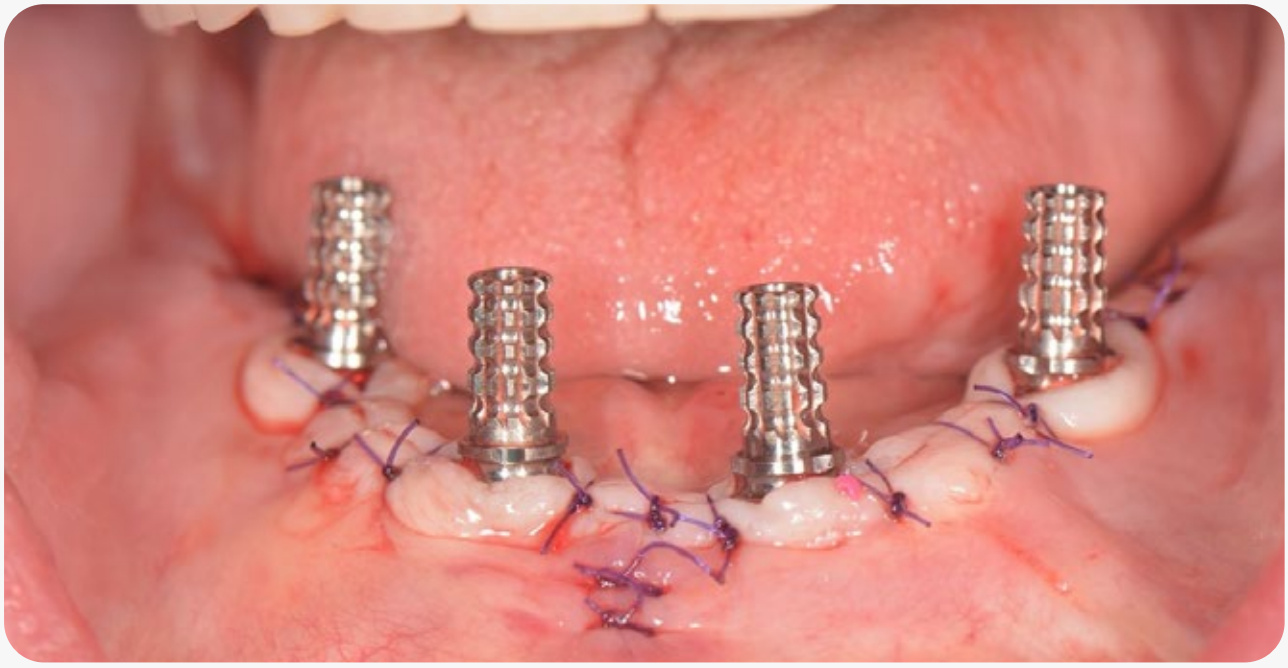
Implants were placed using the handpiece for final positioning.
All implants achieved a torque greater than 45 N.cm



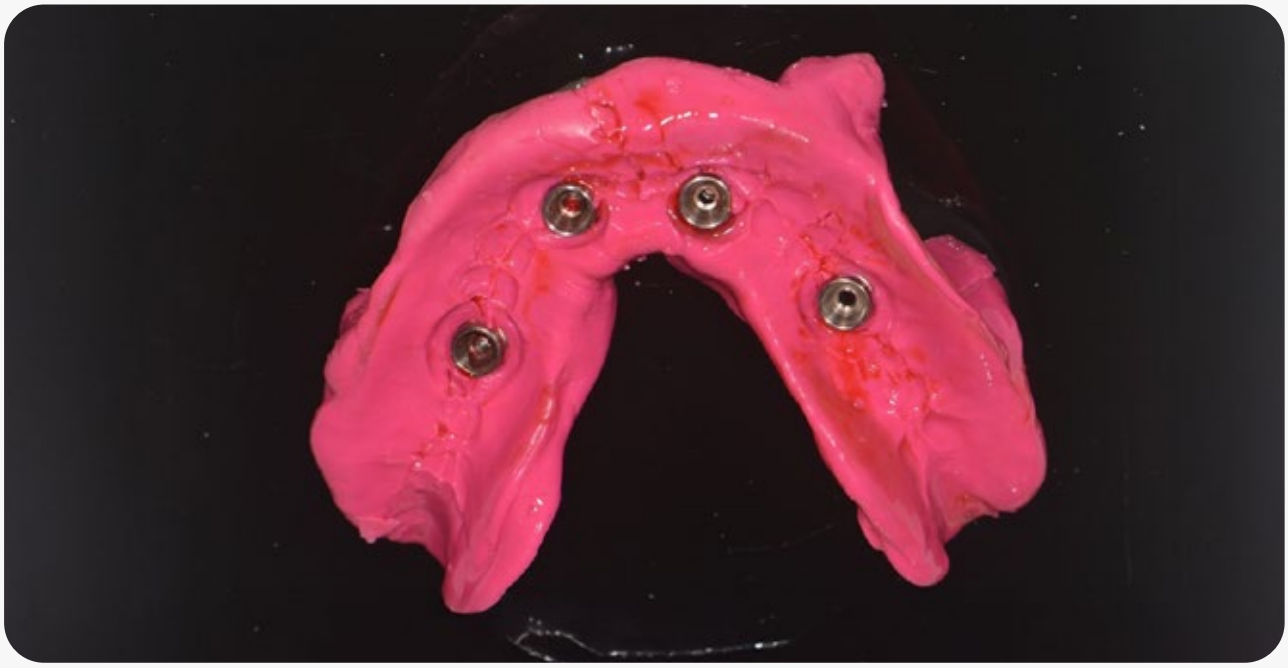
Straight multi-unit abutments were torqued to 32 N.cm, while angulated abutments were torqued to 20 N.cm



Healing abutments were placed prior to suturing, which was performed using 5-0 PGA suture material



Titanium temporary abutments were shortened and prepared for connection to the acrylic prosthesis on the multi-unit abutments



Mobile prosthesis connected to titanium temporary abutments

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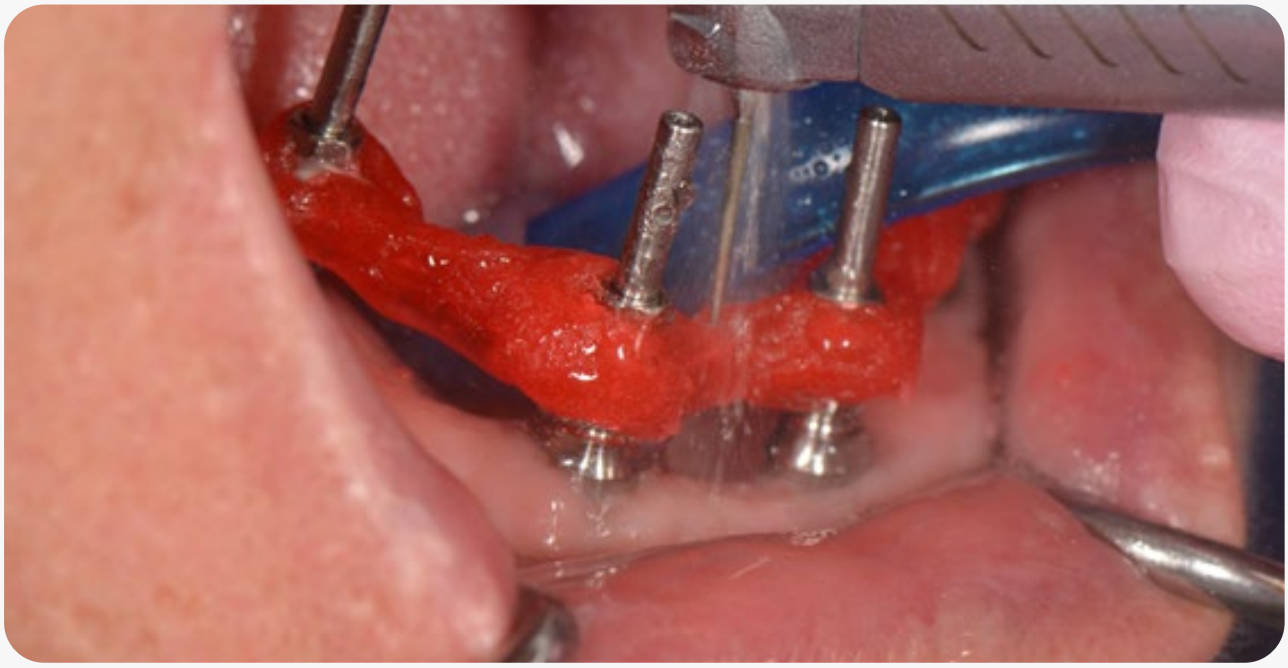
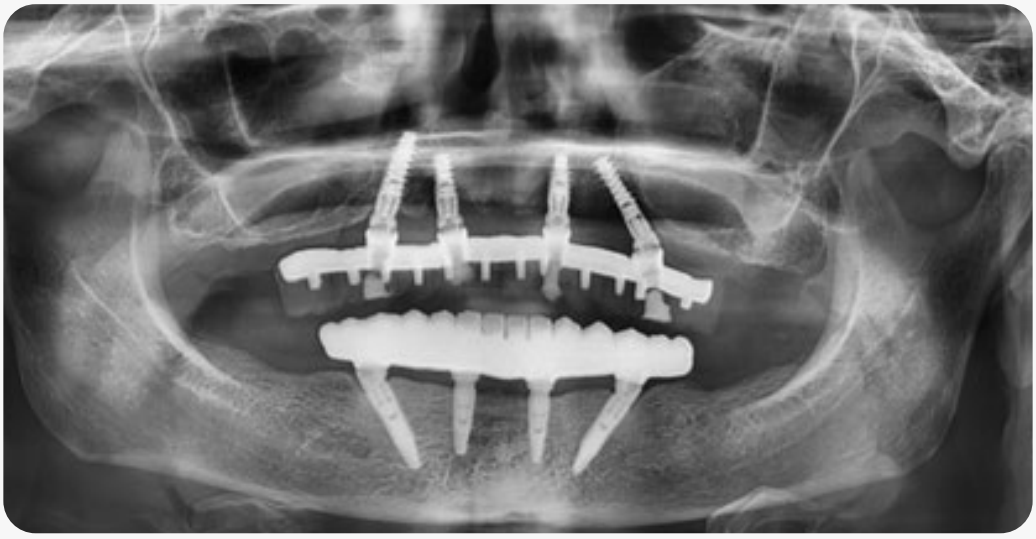
Temporary acrylic prosthesis was fixed to the MUAs, and oral hygiene along with soft diet instructions were provided



After six months, the position of the MUAs was transferred to the lab, and an open-tray impression was taken

The final prosthesis was digitally designed and milled from zirconia, then individualized by hand. The gingival portion consists of highly polished zirconia without glaze. Titanium copings were cemented within the bridge

Final zirconia prosthesis fixed in the mouth (Applied torque of 10 N·cm)



Panoramic X-rays follow-up: 1.5 years after implant placement

TESTIMONIAL

DR. BERISLAV MOSTARAC

Professional opinion of the product and procedure, focusing on your learning from the case

Regarding the self-cutting design of the NUVO ConicalFIT™ implant, it is satisfied with the implant behavior in Type I bone. Another treatment option was placement of more implants, but regarding the fact that periodontitis risk is higher with a higher implant number and regarding patient's financial issues I decided to follow basic all-on-4 protocol.

The challenge during treatment is a high risk of perimplantitis, which is resolved by strict recall protocol.

In the future I would recommend narrow MUAs on anterior implants due to more effective design when smaller diameter incisors design is needed.

TURKIYE

PRE-PROSTHETIC PLANNING AND EXECUTION OF FULL ARCH FP1 REHABILITATION OF THE MAXILLA

PROF. DR. DORUK KOÇYİĞİT

DR. TOLGA PEKPERDAHCI

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PROF. DR. DORUK KOÇYİĞİT

ABOUT THE CASE

PRE-PROSTHETIC PLANNING AND EXECUTION OF FULL ARCH FP1 REHABILITATION OF THE MAXILLA

DR. TOLGA PEKPERDAHCI

NUVO ConicalFIT™ Implant System

NUVO ConicalFIT™
Tapered Implant
4.0 x 11.5mm

NUVO ConicalFIT™
One Step Hybrid
Coping Titanium
Abutment 4.8

NUVO ConicalFIT™
Multi Unit Abutment
NP Straight 4.8

OVERVIEW

Patient

Male, 1963. He has not got any systemic disease.

Anamnesis and Clinical Examination

Current Medications

No significant history of medication use.

Clinical Examination

Terminal Dentition on the upper jaw and left edentulous area on the lower jaw.

Treatment Plan

1. CT examination was performed.
2. Implants were placed at positions #17, #15, #12, #21, #22, #25, and #27 with immediate loading at the time of surgery, along with simultaneous hard and soft tissue augmentation. Additional implants were placed at positions #45 and #47.
3. A digital impression was taken, and Exocad software was used for pre-planning the final restorations. Implant positions were determined based on prosthetic planning, and a tooth-borne pilot guide was designed.
4. A digital impression was taken 4 months after surgery.
5. A screw-retained monolithic zirconia full-arch restoration was fabricated and delivered.
6. A postoperative check was performed one year later.

Surgery

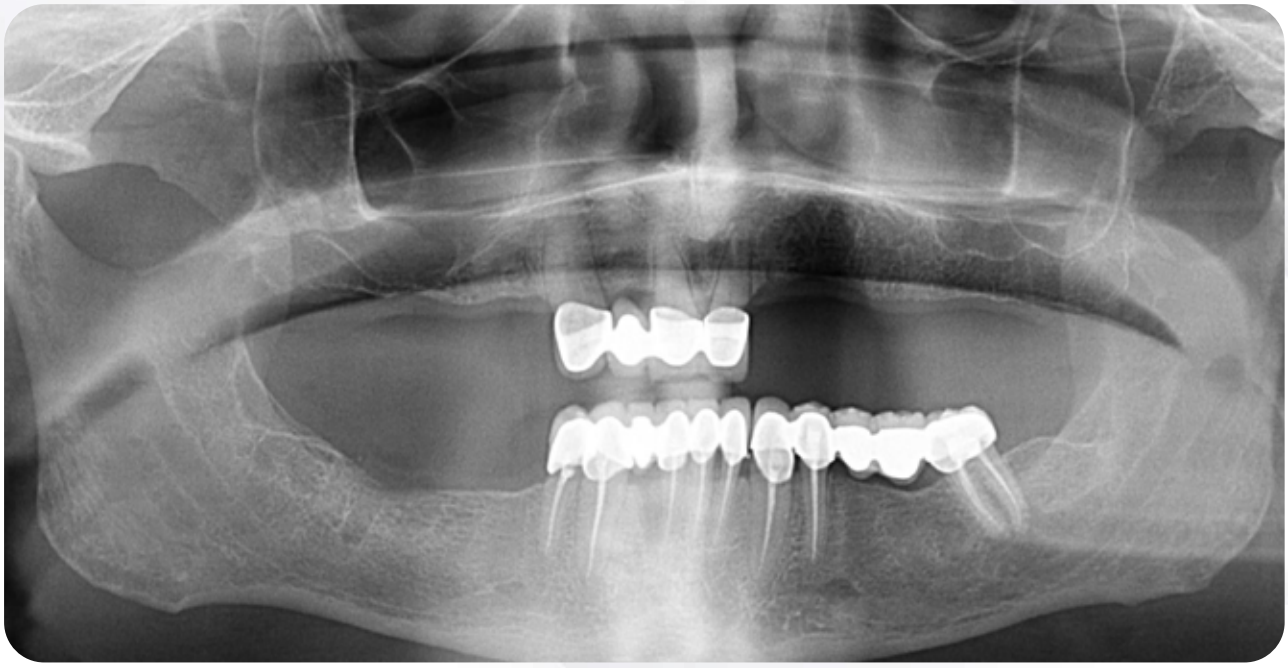
Augmentin 1000 mg (2 × 1) was prescribed 24 hours prior to surgery. The procedure was performed in September 2022 under local infiltration anesthesia using Ultracain D-S Fort (Articaine with epinephrine), 5 × 1.7 ml.

A tooth-borne pilot guide was seated in the maxilla, and posterior implants on both the right and left sides were drilled and placed freehand. Two anterior implants were placed immediately into fresh extraction sockets, with the junctional gaps filled using Botiss Maxgraft. Multi-unit abutments were connected, and a manual impression was taken.

After model fabrication and digitalization, a temporary full-arch PMMA bridge was designed and produced using a CAM machine.

Four months later, the temporary bridge was removed, and clinical evaluation was performed. Following uneventful healing, a digital impression was obtained. A full-arch monolithic zirconia bridge was designed using Exocad software and milled with a CAD/CAM machine.

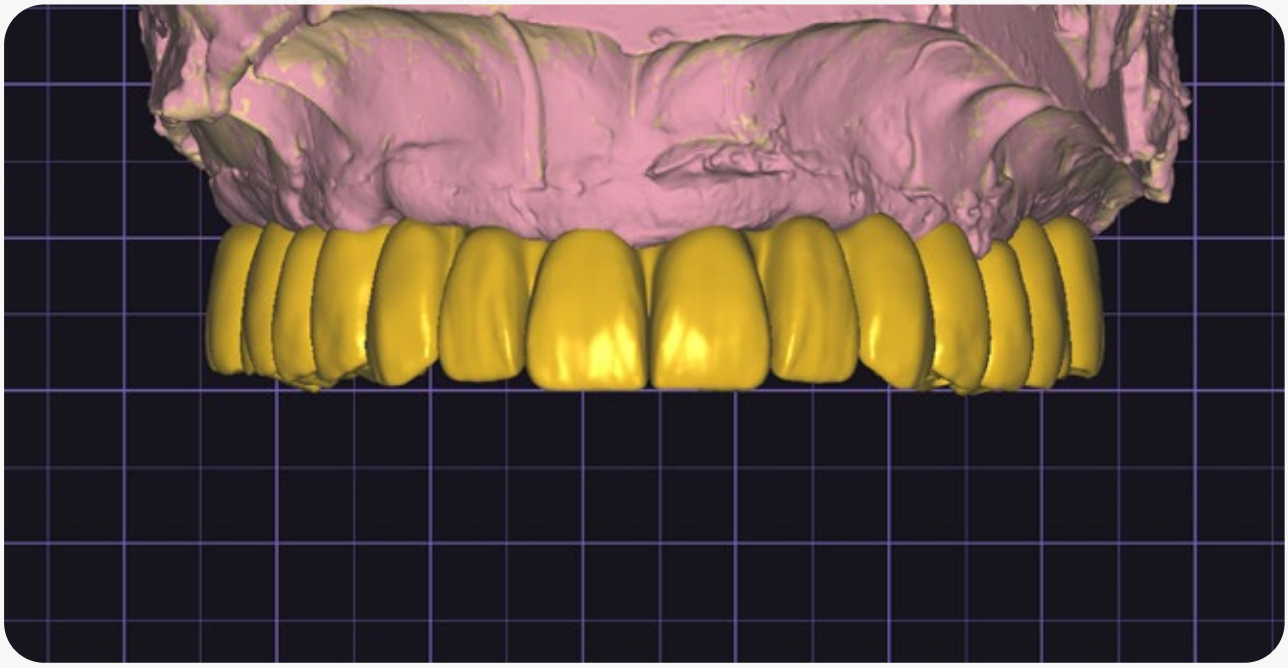
The screw-retained single-piece zirconia bridge was delivered to the patient. Occlusion was thoroughly checked, and a routine follow-up appointment was scheduled.



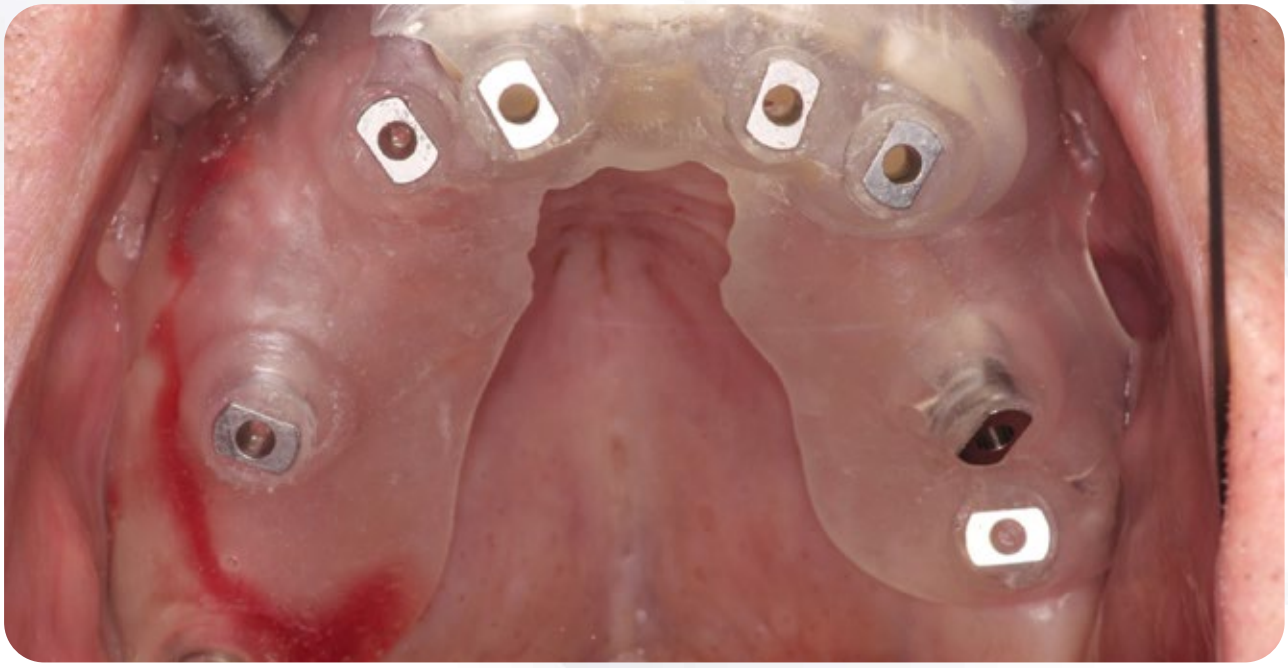
Panoramic X-ray of the patient

Clinical view of the patient

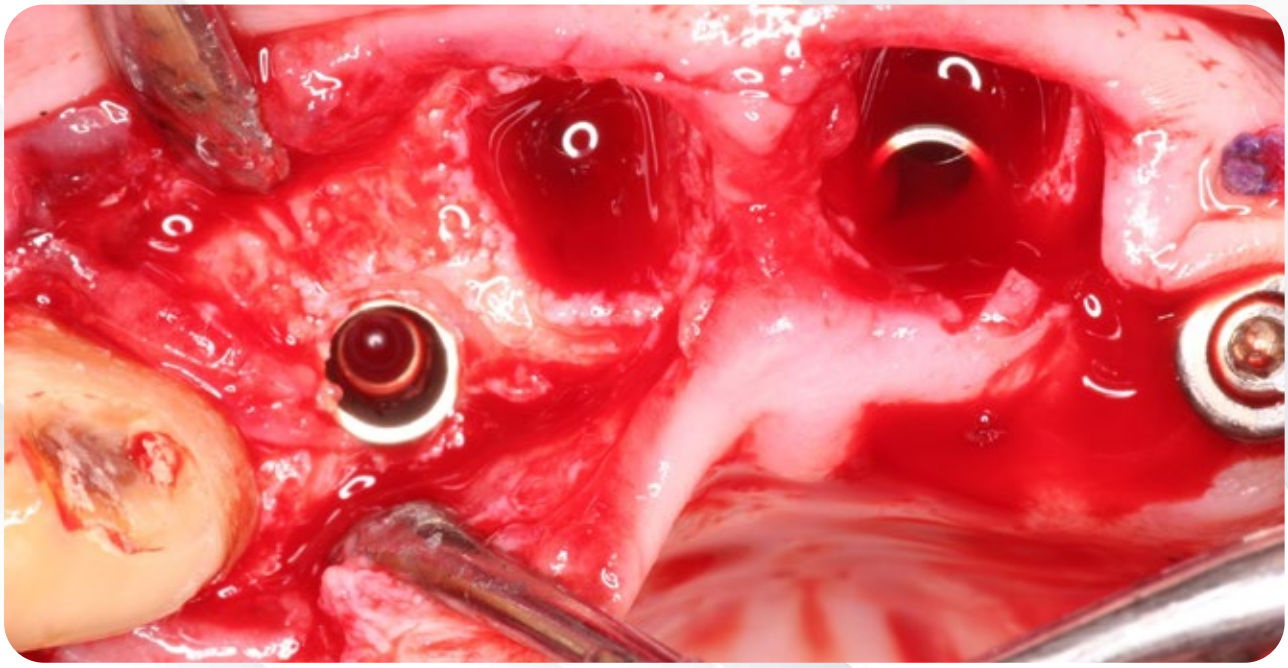
Occlusal clinical view of the patient



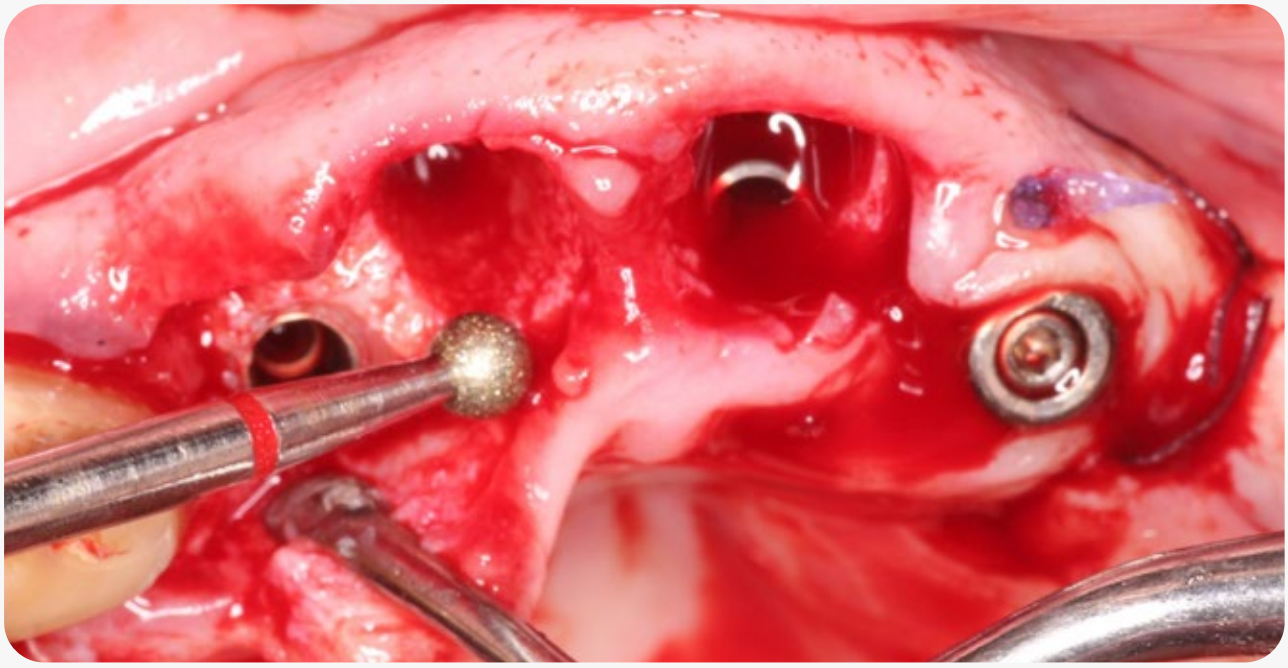
Pre-prosthetic design of the patient before the rehabilitation



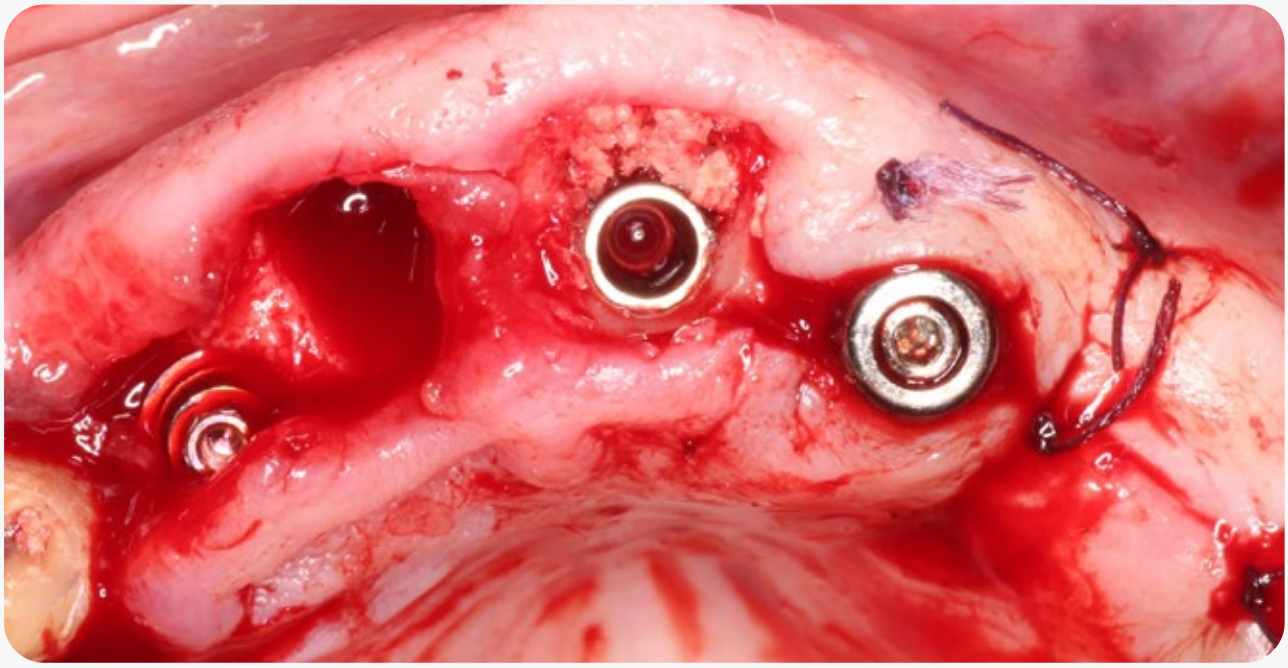
Pilot drill guide was seated and stabilized with the screws



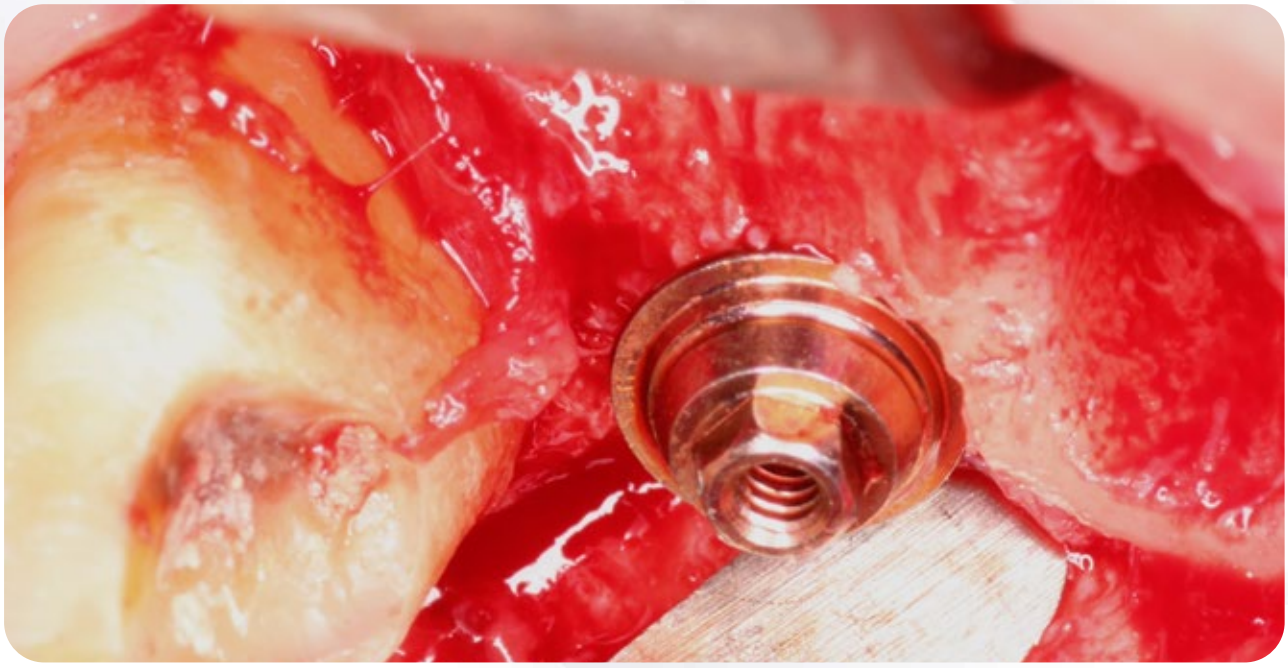
Placement of the anterior implants and the occlusal view of the direction



Interdental spaces were created and oriented with the help of the burs



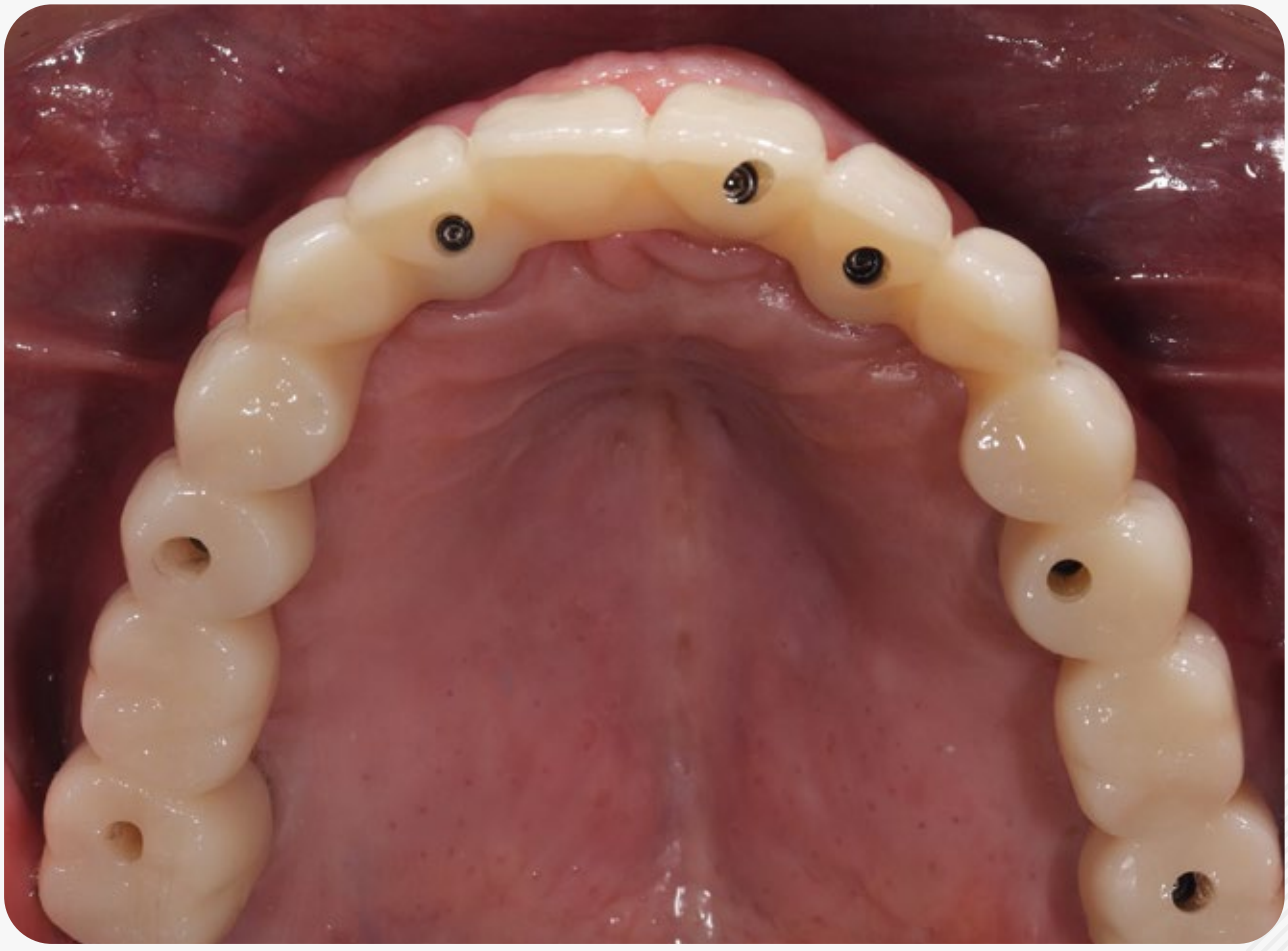
The junctional gap was filled with allograft material



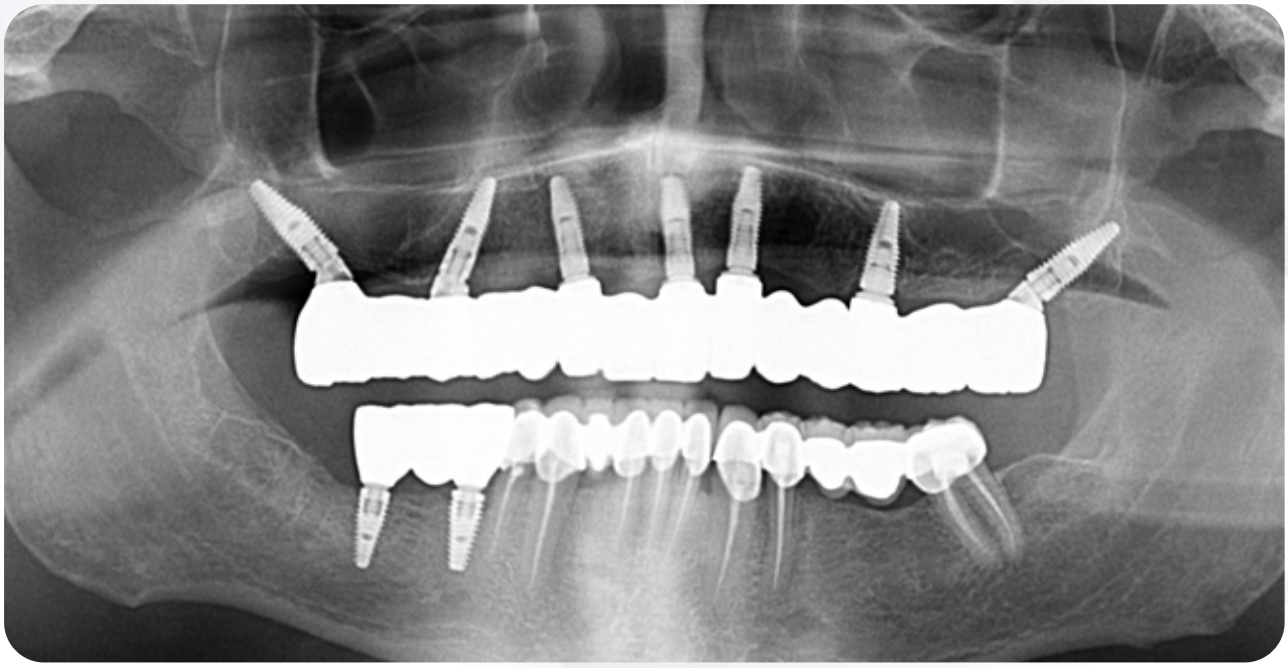
MUA were seated and checked before the closure of the surgical sides

After fixation of the temporary bridge made of PMMA

Four months later, before the final bridge delivery, an occlusal view of the rehabilitation site was taken



The final delivery



A follow-up radiograph of the crown was taken one year after placement

FROM PLANNING TO EXECUTION: FULL-ARCH FP1 MAXILLARY REHABILITATION

TURKIYE

PROF. DR. DORUK KOÇYİĞİT

DR. TOLGA PEKPERDAHCI

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PROF. DR. DORUK KOÇYİĞİT

ABOUT THE CASE

FROM PLANNING TO EXECUTION: FULL - ARCH FP1 MAXILLARY REHABILITATION

DR. TOLGA PEKPERDAHCI

NUVO ConicalFIT™ Implant System

NUVO ConicalFIT™
Multi Unit Abutment
Straight 3.5 NP

NUVO ConicalFIT™
Multi Unit Abutment
Analog 3.5

Patient

Male, 57 years of age with no any sign of systemic disease.

Anamnesis and Clinical Examination

Terminal Dentition on the lower jaw and edentulous on his upper jaw.

Current Medication and Alcohol Consumption

No routine medication. No alcohol consumption in lifetime.

Clinical Examination

Clinical examination revealed severe periodontal problems on the mandible with anterior teeth. In his clinical anamnesis, he has not been treated due to his periodontal problems since 2005. He explained that he is happy with his denture on the upper jaw however he wants to use fixed rehabilitation on his mandible.

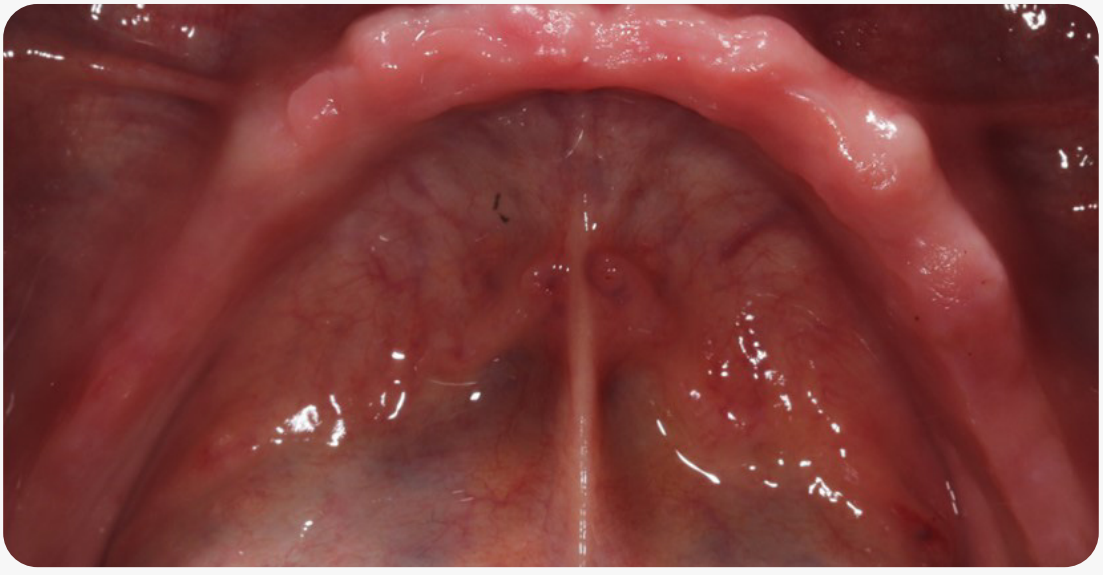
Treatment Plan

- CT examination was performed.
- Extractions were carried out in the lower jaw, including teeth #32, #31, #41, #42, and #43.
- Implants were placed at positions #35, #32, #42, and #45. abutments and temporary abutments.
- A full-arch, implant-supported immediate loading protocol was followed using 4 NUVO ConicalFIT™ Connection implants with multi-unit and temporary abutments.
- Full acrylic temporary bridges were fabricated in the lab and delivered to the mandibular arch.
- After 4 months, the lower jaw was restored with a hybrid bridge combining titanium and acrylic.
- A 1-year postoperative check was performed.

Radiographs

Terminal dentition on his lower jaw, 4 NUVO ConicalFIT™ implants were planned for fixed full arch rehabilitation.

Initial Photographs



Initial situation of the lower jaw: Hopeless teeth had been extracted three months prior to surgery

Surgery Protocol

1. Augmentin 1000 mg (2×1) was prescribed 24 hours prior to the surgery.

2. Surgery was performed in November 2022.

3. Local infiltration anesthesia was administered using Ultracain D-S Fort (Articaine/epinephrine) — 5 × 1.7 ml cartridges.

4. A full-thickness flap was elevated from the bone crest along the attached gingiva. Alveoloplasty was performed using burs, and 2.5 mm alveolectomy was completed with piezo-surgery for restorative space management.

5. Implants were placed simultaneously:

NUVO ConicalFIT™ 4.5 × 13 mm at position #35

NUVO ConicalFIT™ 3.5 × 11 mm at positions #32 and #42

NUVO ConicalFIT™ 4.5 × 13 mm at position #45

All implants achieved initial torque values over 60 N.cm. 30° multi-unit abutments were used in the posterior sites. 0° multi-unit abutments were selected for anterior positions. Abutments were torqued to 12 N.cm to accommodate immediate loading. Healing abutments were placed, and the flap was closed using 4-0 PGA sutures.

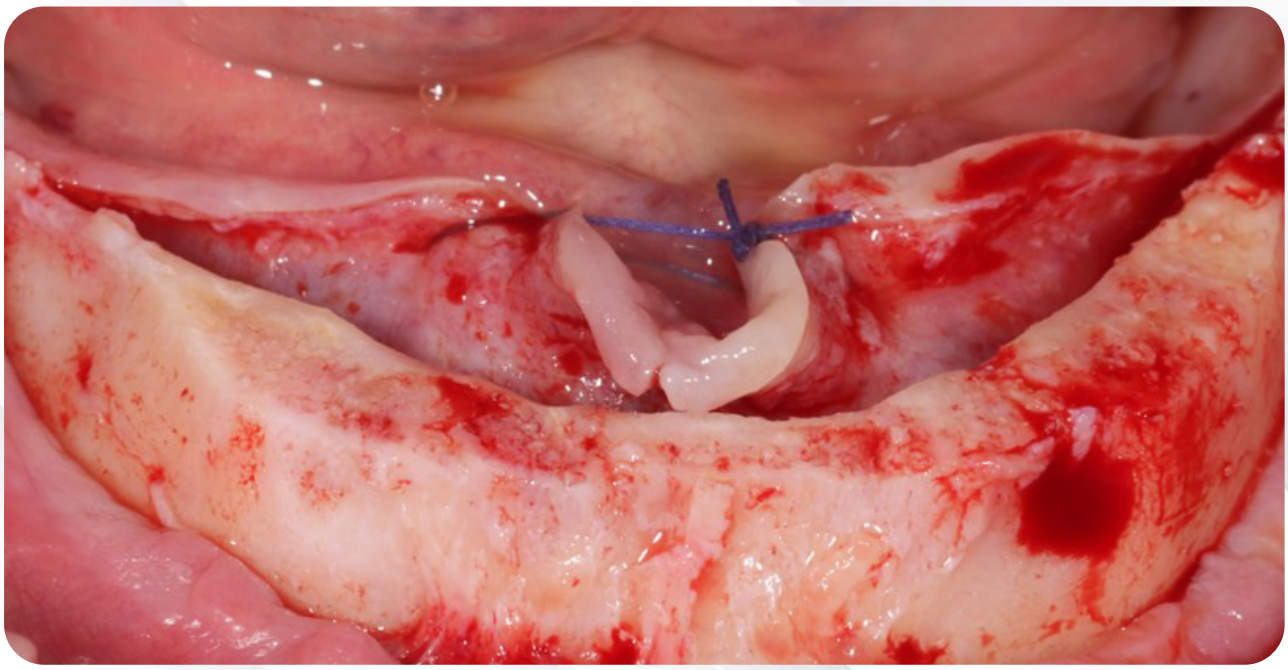
6. A pre-fabricated prosthesis was adapted and used as a temporary restoration using appropriate chairside techniques. After laboratory procedures, the temporary prosthesis was fixed in place, and occlusal adjustments were completed. The patient was instructed to follow a soft diet and given full postoperative care instructions.

7. Four months later, the temporary prosthesis was removed. A clinical and radiographic evaluation confirmed uneventful healing. Open-tray impression copings were placed on the MUAs, and an impression was taken using an individual tray.

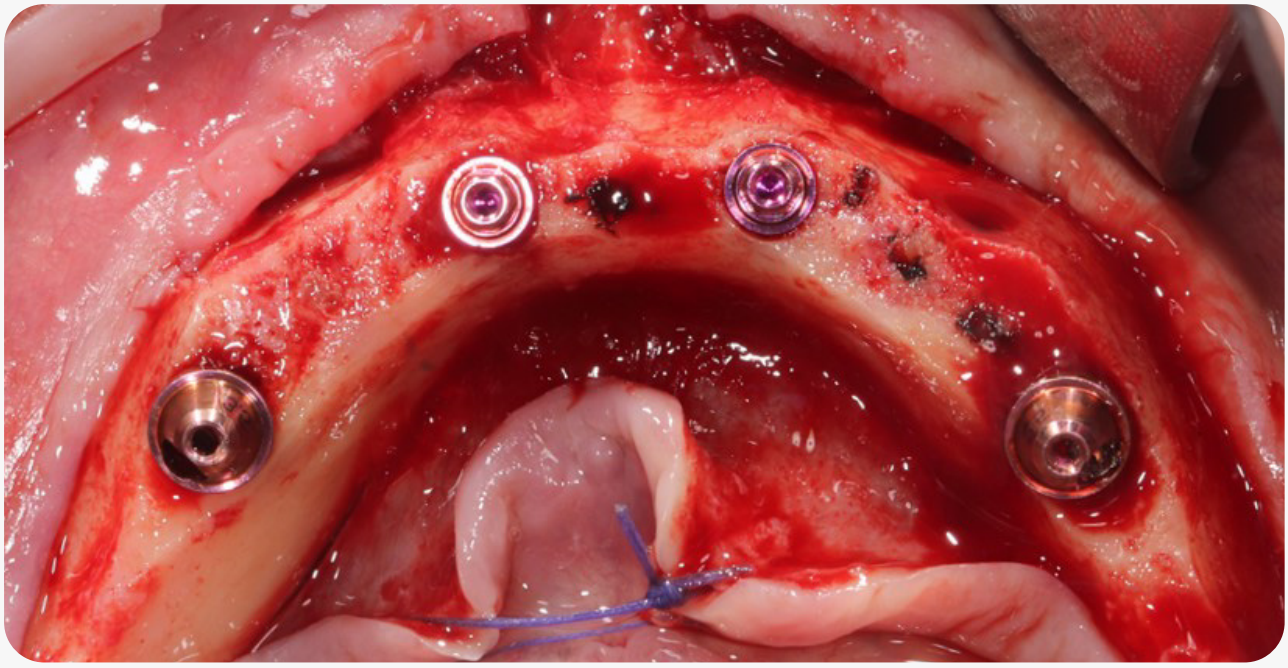
8. A stone model was prepared and digitally scanned. Based on the data, a titanium bar was designed and milled. The final restoration consisted of full acrylic teeth over a titanium bar, finished with a smooth surface for hygiene and comfort.

9. The final prosthesis was screwed in, occlusion was verified and adjusted, and a routine recall appointment was scheduled.

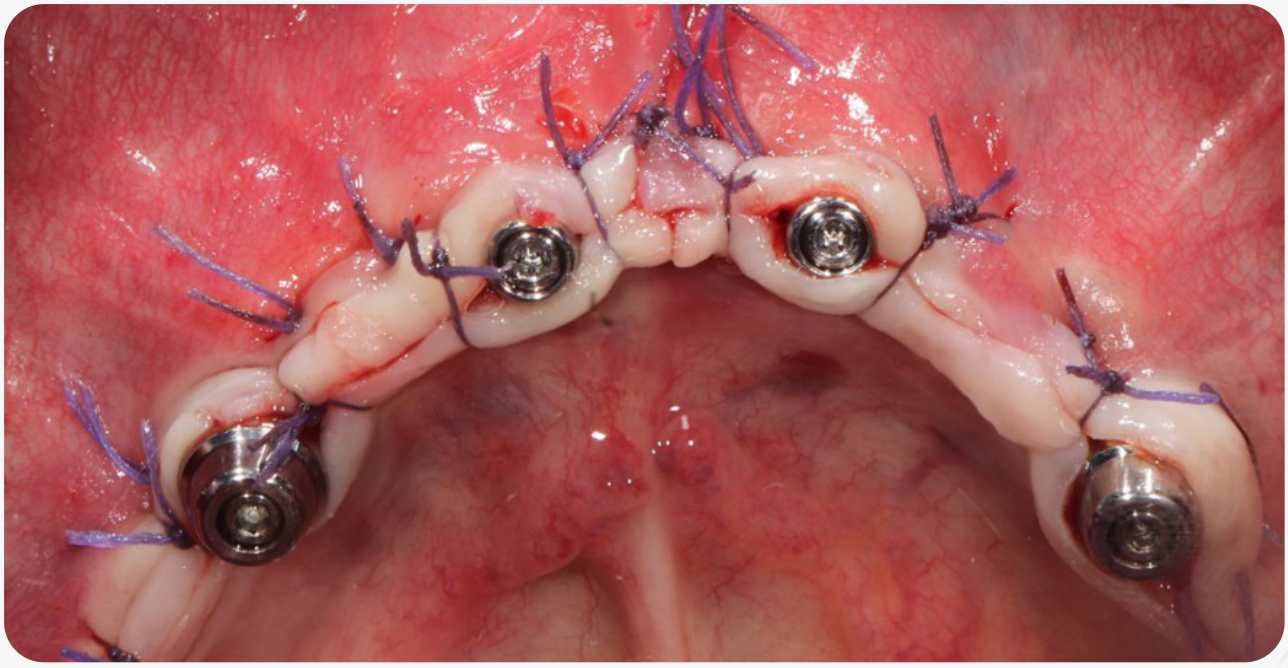
Following the dissection of the mandibular region from molar to molar, a 2 mm alveoloplasty was performed using piezo-surgery



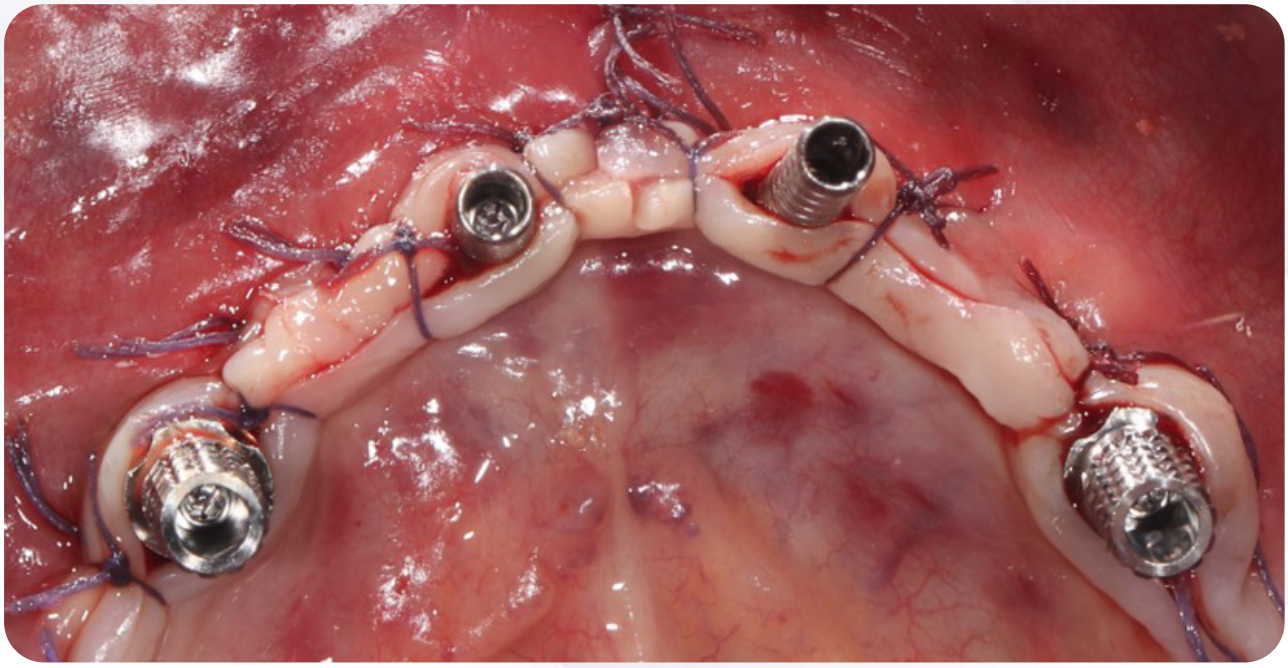
The alveolar ridge was flattened across the full-arch based on the patient's smile line and restorative space requirements



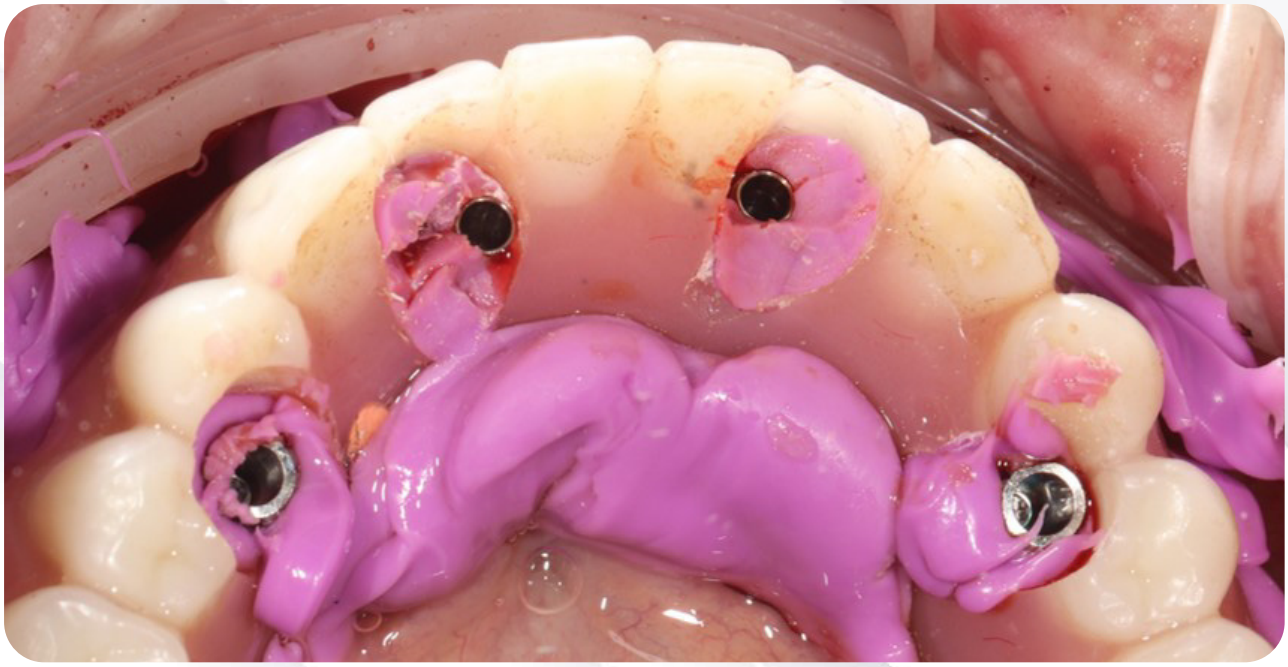
Standard platform 30-degree multi-unit abutments were placed on the posterior implants, while narrow platform straight multi-unit abutments were used on the anterior implants, selected according to implant diameters



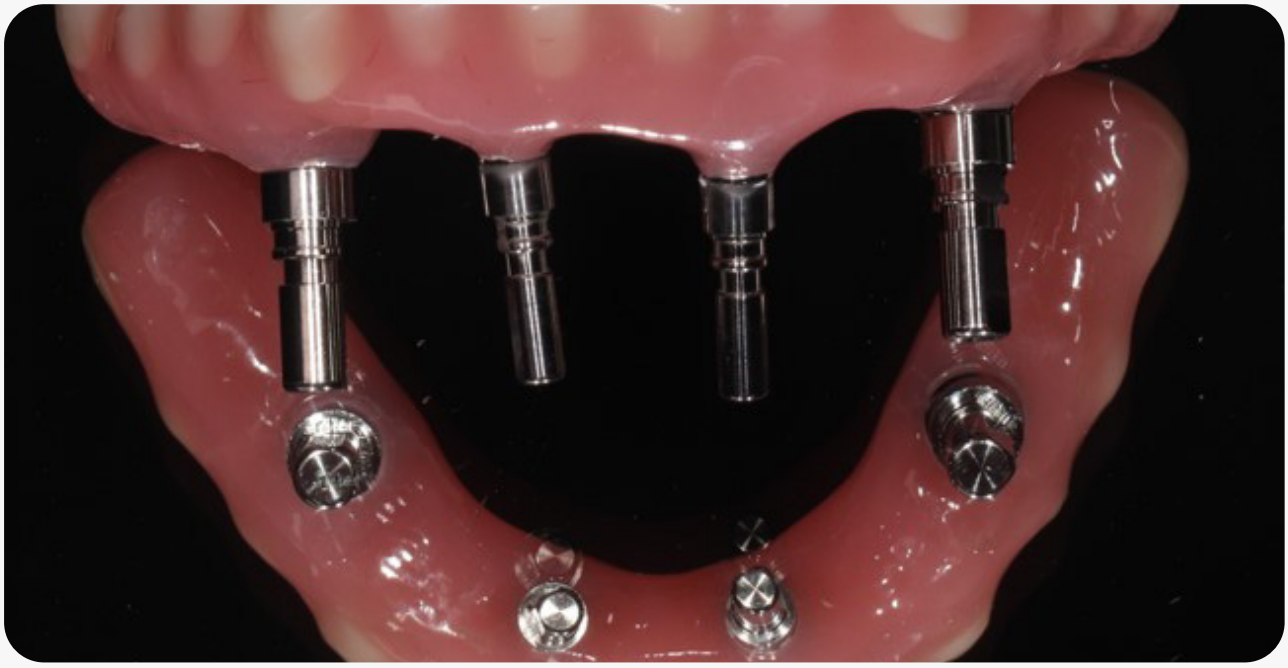
After bleeding control on the multi-unit abutments and fixation of the healing caps, primary closure was achieved using 4.0 Vicryl resorbable sutures with a combination of mattress and single suture techniques



The previously prepared total prosthesis was planned for immediate loading. Prior to its fixation, temporary abutments were secured onto the multi-unit abutments, selected according to the implant diameters



Access holes were prepared on the prosthesis, and bite registration material was applied to its intaglio surface. After waiting 30 seconds to ensure complete fixation between the prosthesis, abutments, and material, the prosthesis was unscrewed and removed from the mouth



Temporary prosthesis was finished on the day of surgery in the lab

Clinical view of the temporary prosthesis

2 months after surgery, nice soft tissue healing and keratinized tissue contour was achieved around the implant and abutments

A titanium-milled bar with an acrylic suprastructure was used to complete the screw-retained prosthesis supported by four implants and multi-unit abutments

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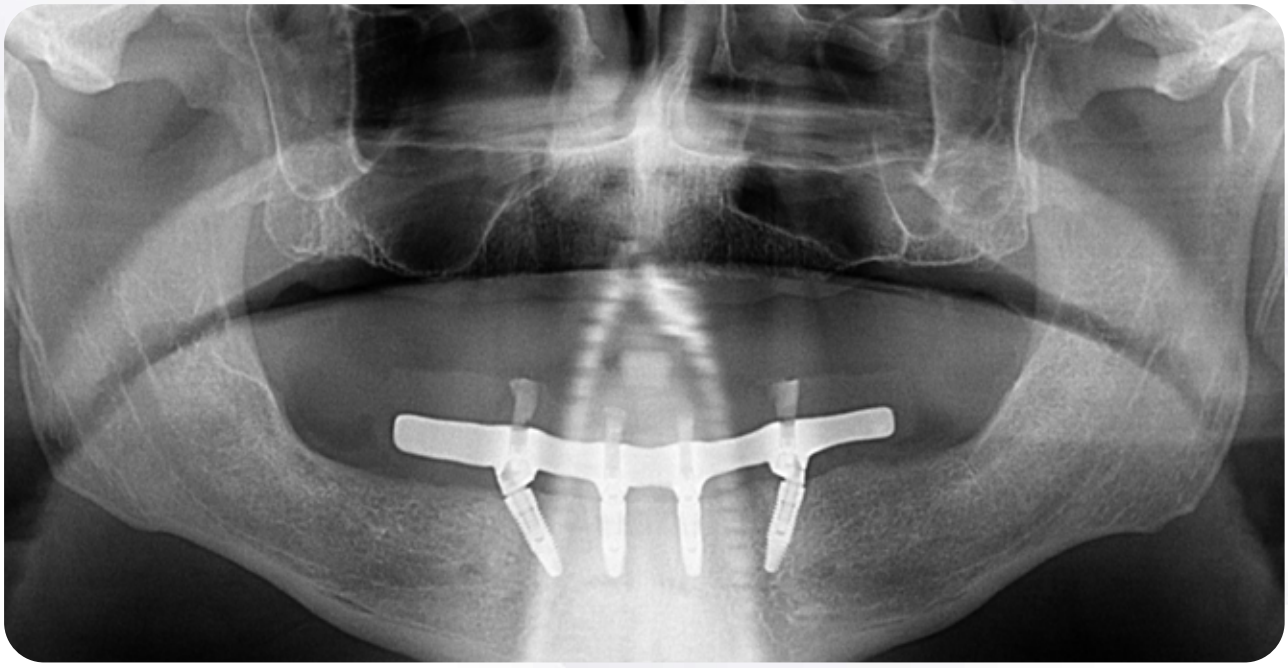
Clinical view of the patient: 4 months after surgery and the final prosthesis



Routine radiographic check of the patient one year after the postoperative prosthetic phase

TESTIMONIAL

PROF. DR. DORUK KOÇYİĞİT

DR. TOLGA PEKPERDAHCI

Professional opinion of the product and procedure, focusing on your learning from the case?

NUVO ConicalFIT™ has a great advantage to make a proper insertion of the implants on the mandible for immediate loading procedures.

What are the challenges during treatment and how were they resolved?

Abutment and implant connections can be challenging during immediate loading procedures. However, we did not observe any loosening of abutment connections or screws throughout the entire treatment period.

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TURKIYE

IMMEDIATE REIMPLANTATION OF DENTAL IMPLANTS INTO SITES OF PREVIOUS FAILURE AND SITES OF TEETH EXTRACTION

PROF. DR. ERHAN DURSUN

DR. MERT TEZCAN

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PROF. DR. ERHAN DURSUN

ABOUT THE CASE

IMMEDIATE REIMPLANTATION OF DENTAL IMPLANTS INTO SITES OF PREVIOUS FAILURE AND SITES OF TEETH EXTRACTION

DR. MERT TEZCAN

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BACK TO SUMMARY

NUVO ConicalFIT™ Implant System

NUVO ConicalFIT™
Cement Retained
Abutment NP

NUVO ConicalFIT™
Tapered Implant
5.0 x 10mm

Patient

Female, 1959

Anamnesis and Clinical Examination

The patient complained of recurrent abscesses, bleeding while brushing teeth, and halitosis around implants #24 and #14. Sensitivity was noted on percussion of the crowns at #24 and #14. The patient requested a treatment with long-term success. Marginal bone loss and periodontal disease were observed in the surrounding tissues of old bridges in the lower jaw. The patient has a low smile line and a medical history of type 2 diabetes mellitus and hypertension.

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Planning

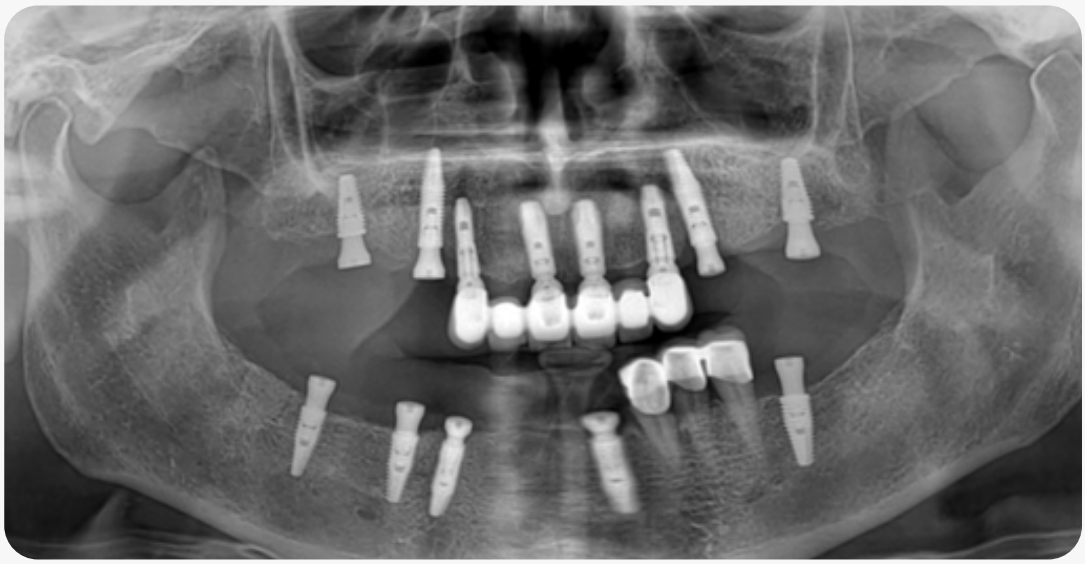
- Atraumatic removal of #32, #31, #43, #44, #46, #47 teeth and #24 and #14 implants
- Flapless immediate #14, #16, #24, #26, #32, #43, #44, #46 and #36 implant surgery.
- Healing period
- Definite restoration

Surgery Protocol

Patient received 1 gram amoxicillin/clavulanate 1 hour before surgery and continued 2 gram per day for 5 days. Intervention was conducted under local anesthesia Ultracain D-S Fort (Articaine containing 1:100,000 epinephrine). As planned no flap reflection was performed. The drilling protocol was made according to the manufacturer's instructions: Initial drill, Conical drill Ø2.0, Ø3.5, and Ø4.3, respectively.

2 NUVO ConicalFIT™ 4.3 x 16 mm implants were installed in upper first premolar regions.
2 NUVO ConicalFIT™ 5 x 10 mm implants were installed in upper first molar regions.
2 NUVOConicalFIT™ 4.3 x 16 mm implants were installed in #44 and #46 regions.
2 NUVO ConicalFIT™ 3.75 x 13 mm implants were installed in lower anterior region.

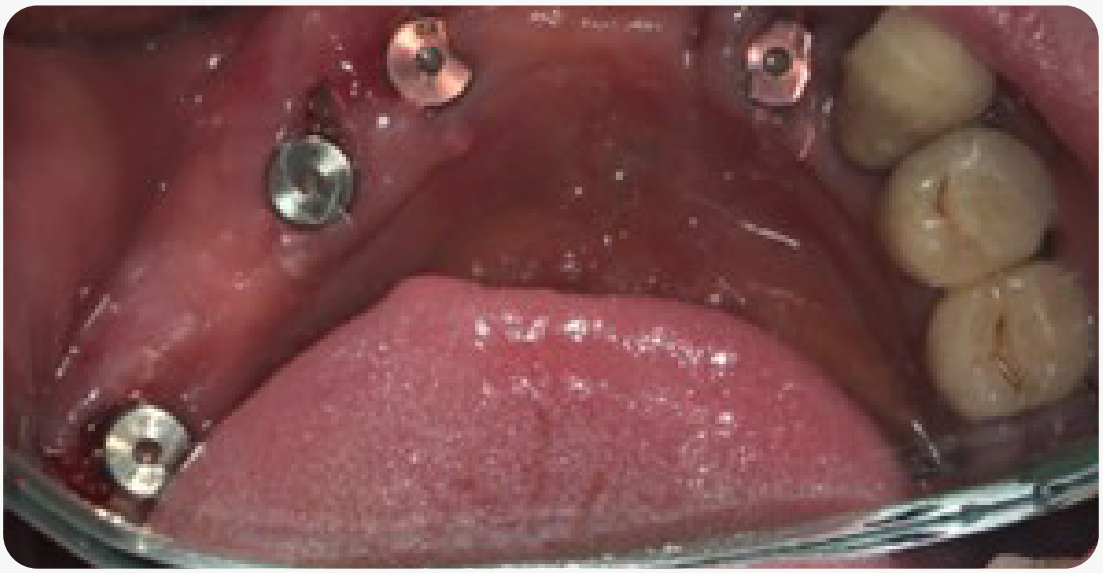
Bone type was recorded as Type 2. The buccal gap between implant and the intact thin buccal bone was grafted with collagenated xenograft (Genos Osteobiol, Tecnoss Dental, Turin, Italy) mixed with iPRF which was obtained by patients own blood.



After 8 weeks of healing

Base-line clinical and radiological situation

Immediately after teeth extraction



Immediately after flapless implant surgery

Prosthesis Protocol

After a 2-month osseointegration period and soft tissue stabilization, closed-tray impression copings were screwed onto the implant bodies. Conventional closed-tray impressions were then taken using additional silicone material.

The appropriate cement-retained abutments were selected from the catalogue and fitted onto the plaster model. Porcelain-fused-to-metal restorations were chosen for this case. The cement-retained abutments were tightened to a torque of 20 N.cm.

Following try-in and necessary adjustments, the cement-retained bridges were luted with zinc polycarboxylate cement. Occlusion was thoroughly checked and confirmed.

After 4 months of healing

TESTIMONIAL

PROF. DR. ERHAN DURSUN

DR. MERT TEZCAN

Professional opinion of the product and procedure, focusing on your learning from the case.

Achieving primary stability can be challenging following implant removal. The macro design of the implant plays a critical role in establishing primary stability. A passive fit is more readily achieved with implant-supported, cement-retained fixed partial prostheses. The design of cement-retained abutments is a key factor influencing prosthetic retention.

What were the other treatment options? Why choose this solution?

One of the alternative treatment options considered was a removable partial denture. However, implant-supported fixed prostheses are often preferred by patients due to their superior comfort and overall satisfaction

Tips – “learning outcomes”

While digital workflows are gaining popularity, the conventional manufacturing workflow remains viable in many clinical situations. Cement-retained prostheses are relatively easy for dental technicians to fabricate. However, meticulous care must be taken during the intraoral luting process, as excess cement remnants may lead to peri-implantitis.

TURKIYE

FULL MOUTH IMPLANT RECONSTRUCTION WITH NUVO: DIFFERENT TREATMENT OPTIONS FOR OPPOSITE JAWS

PROF. DR. ERHAN DURSUN

DR. MERT TEZCAN

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PROF. DR. ERHAN DURSUN

ABOUT THE CASE

FULL MOUTH IMPLANT RECONSTRUCTION WITH NUVO: DIFFERENT TREATMENT OPTIONS FOR OPPOSITE JAWS

DR. MERT TEZCAN

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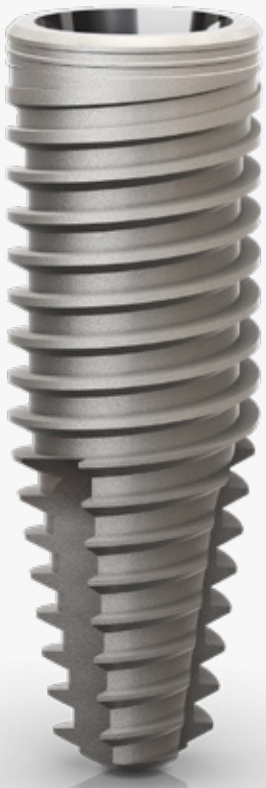
NUVO ConicalFIT™ Implant System



NUVO ConicalFIT™
Tapered Implant
4.3 x 10 mm

NUVO ConicalFIT™
Tapered Implant
3.5 x 13mm

Patient

Female, 1962

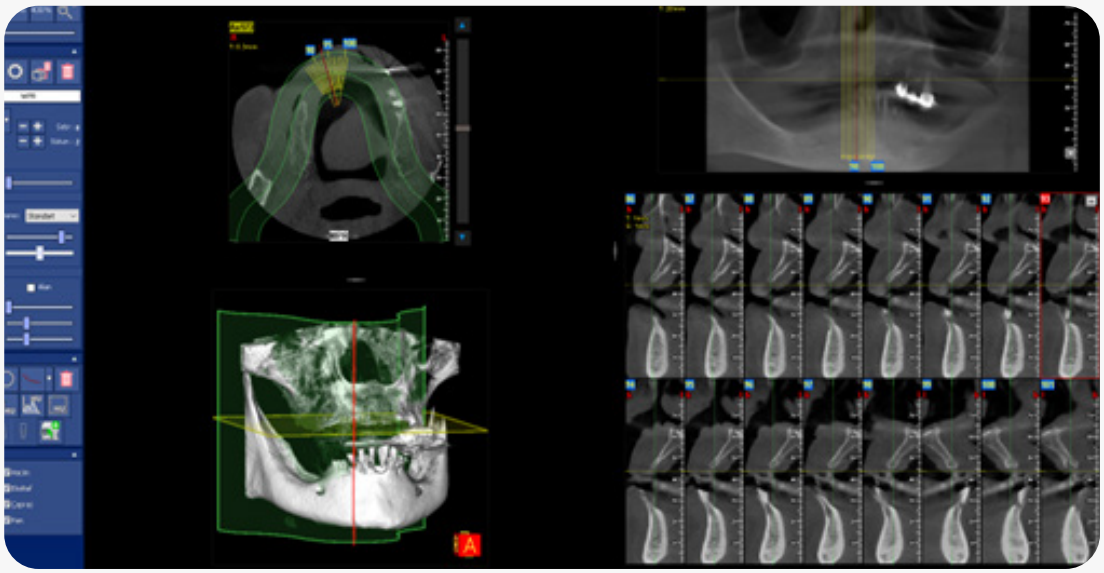
Anamnesis and Clinical Examination

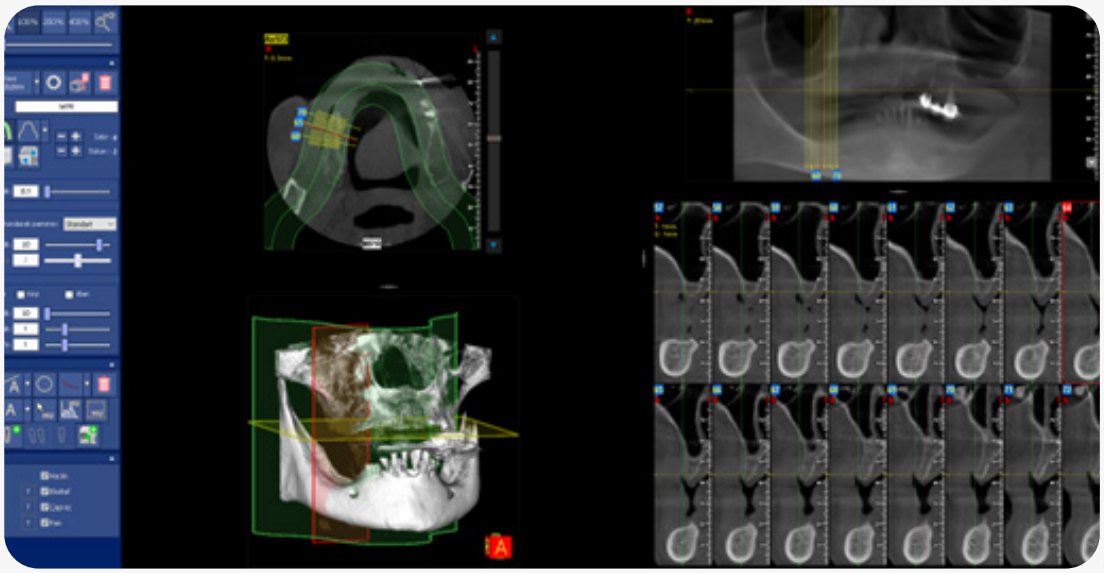
The patient reported that the removable prosthesis had become unstable and had lost retention, resulting in impaired masticatory function. A chronic periodontal abscess was present around teeth #25 and #26. The patient expressed a desire for a healthy, comfortable, and well-functioning prosthetic solution.

Clinical examination revealed marginal bone loss and periodontal disease in the lower jaw, particularly in the tissues surrounding the worn dentition. The patient has a low smile line and no history of systemic diseases or allergies.

Planning

- Atraumatic removal of teeth.
- Seven implant placement with flap elevation for upper jaw.
- Two of them inclined, four implant placement for lower jaw
- Healing period
- Definitive restoration





Base-line clinical and radiological situation

Surgery Protocol

Patient received 1 gram amoxicillin/clavulanate 1 hour before surgery and continued 2 gram per day for 5 days. Intervention was conducted under local anesthesia Ultracain D-S Fort (Articaine containing 1:100,000 epinephrine). For upper jaw as planned flap elevation was performed. The drilling protocol was made according to the manufacturer's instructions.

2 NUVO ConicalFIT™ 4.3 x 10 mm implants were installed in #16 and #26 regions.

4 NUVO ConicalFIT™ 3.5 x 13 mm implants were installed in #14, #13, #11 and #23 regions.

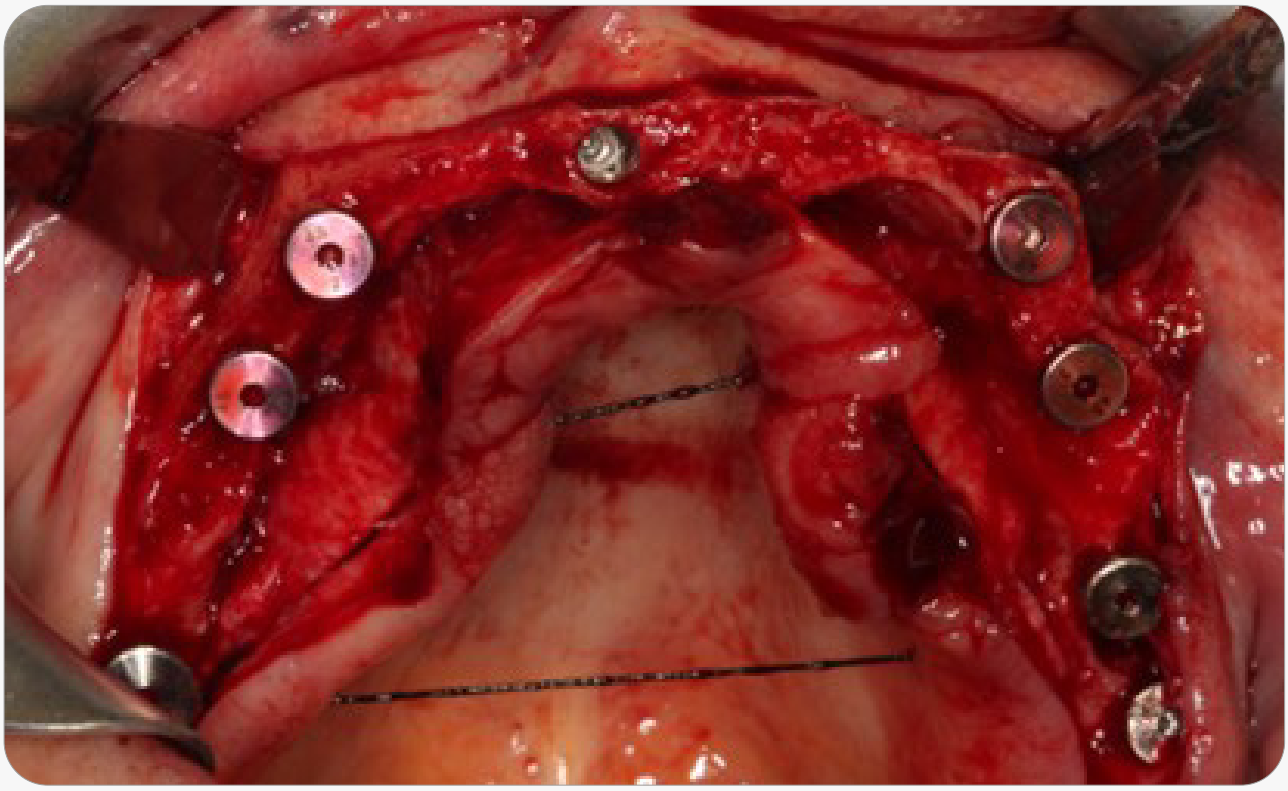
1 NUVO ConicalFIT™ 3.75 x 11.5 mm implant was installed in #24 region. Bone type was recorded as type 3. The buccal gap between implant and the intact thin buccal bone was grafted with collagenated xenograft (Genos Osteobiol, Tecnoss Dental, Turin, Italy) mixed with iPRF which was obtained by patients own blood.

For lower jaw atraumatic teeth extraction carried out.

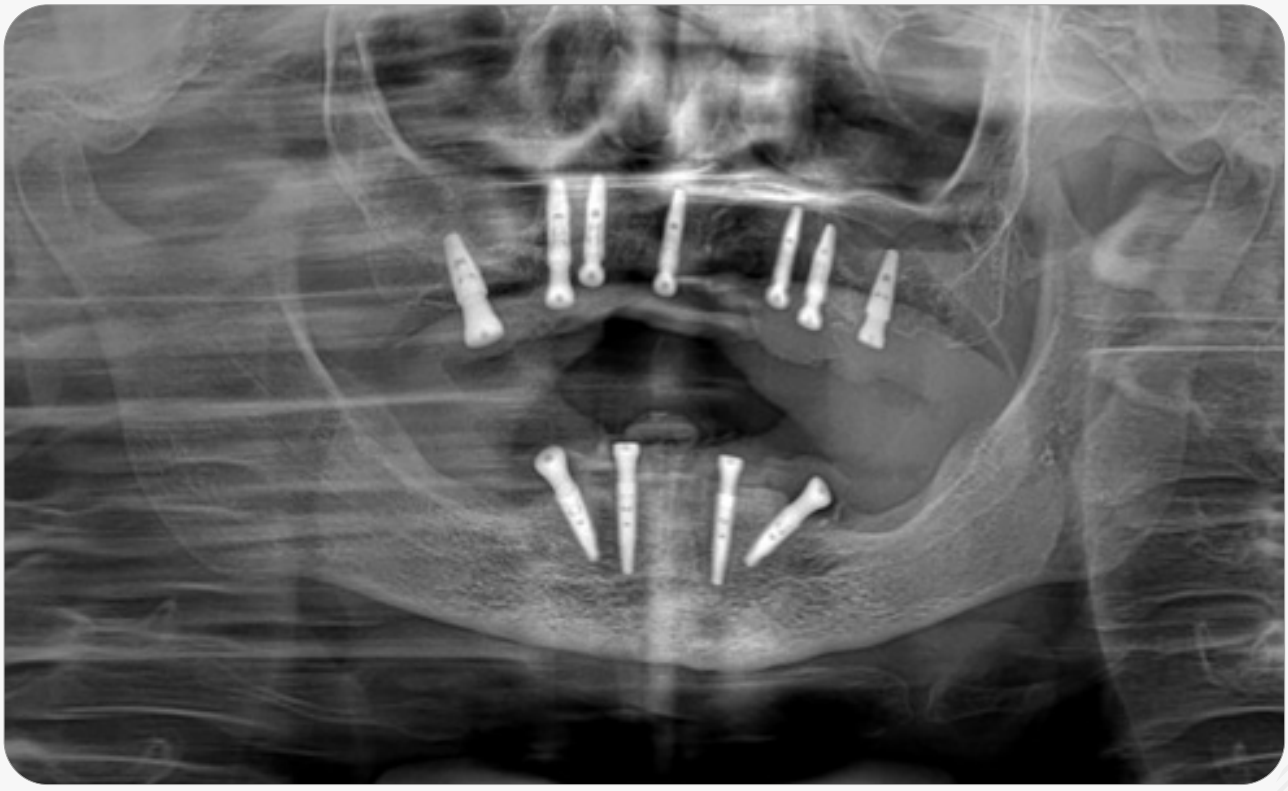
2 NUVO ConicalFIT™ 3.5 x 13 mm implants were installed in premolar regions with 30 degree inclination

2 NUVO ConicalFIT™ 3.5 x 13 mm implants were installed in lower incisor region.

İn lower jaw, bone type was recorded as Type 2. The buccal gap between implant and the intact thin buccal bone was grafted with collagenated xenograft (Genos Osteobiol, Tecnoss Dental, Turin, Italy) mixed with iPRF which was obtained by patients own blood.



Immediately after implant surgery



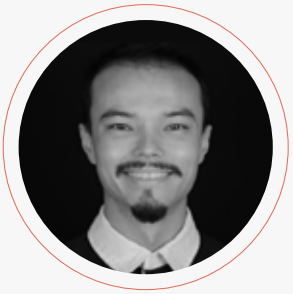
After 8 weeks of healing

Prosthesis Protocol

After a 2-month osseointegration period and soft tissue stabilization, closed tray impression copings were attached to the implant bodies. Conventional closed tray impressions were taken using addition silicone material. The appropriate cement-retained abutments were selected from the catalogue and screwed into the master cast. Porcelain-fused-to-metal restorations were chosen for this case. The cement-retained abutments were torqued to 20 N.cm. Following clinical try-in and necessary adjustments, the cement-retained bridges were luted using zinc polycarboxylate cement. Final occlusion was checked and verified.

TESTIMONIAL

PROF. DR.ERHAN DURSUN



DR. MERT TEZCAN

Professional opinion of the product and procedure, focusing on your learning from the case

The selection of implant length and diameter based on the patient's bone volume is a critical factor when choosing an implant system. In this case, the patient presented with a thin alveolar ridge in the anterior maxilla. Therefore, narrow diameter implants were appropriately selected for the upper anterior region, ensuring optimal placement within the limited bone volume.

What were the other treatment options? Why choose this solution?

An alternative treatment option considered was a removable partial denture. However, implant-supported fixed prostheses provide significantly better patient satisfaction, comfort, and chewing efficiency compared to removable solutions. Given the patient's desire for a stable, functional, and long-term solution, a fixed prosthesis was the preferred treatment choice.

Tips – "learning outcomes"

Edentulism and prolonged use of soft tissue–supported removable prostheses are well-known contributors to progressive jawbone resorption. In this case, the patient had been using a removable prosthesis for an extended period following tooth extractions, leading to substantial bone loss in the upper jaw. Narrow diameter implants present a viable solution in such bone-deficient areas. While digital workflows are increasingly adopted in clinical practice, conventional manufacturing techniques remain highly relevant. Cement-retained prostheses can be fabricated efficiently by dental technicians using traditional methods. However, the intraoral luting step must be executed with great care, as excess cement can contribute to peri-implant disease.

TURKIYE

SINGLE TOOTH REPLACEMENT WITH NUVO CONICALFIT™: IMMEDIATE PLACEMENT & LOADING

PROF. DR. DORUK KOÇYİĞİT

DR. TOLGA PEKPERDAHCI

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PROF. DR. DORUK KOÇYİĞİT

ABOUT THE CASE

SINGLE TOOTH REPLACEMENT WITH NUVO CONICALFIT: IMMEDIATE PLACEMENT & LOADING

DR. TOLGA PEKPERDAHCI

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NUVO ConicalFIT™ Implant System

NUVO ConicalFIT™ Implant Analog SP

NUVO ConicalFIT™ Titanium Temporary Abutment SP

OVERVIEW

Patient

Male, born in 1995, he has not got any systemic disease.

Anamnesis and Clinical Examination

Current Medications

Not any significant medication usage.

Alcohol Consumption

None in lifetime.

Clinical Examination

Missing right first molar and left lower molars. Also due to the extractions severe hard tissue deficiency on both side.

Treatment Plan

1. CT examination
2. Implant placement at #46 with individual healing abutment and soft tissue augmentation during surgery
3. Digital impression taken 3 months post-surgery
4. Screw-retained monolithic zirconia crown placement
5. Postoperative check 1 year later

Surgery Protocol

The patient was prescribed Augmentin 1000 mg (2x1) starting 24 hours prior to surgery. Local infiltration anesthesia was administered using Ultracain D-S Forte (Articaine with epinephrine), 5 cartridges of 1.7 ml each.

A full-thickness flap was elevated without a releasing incision. A 1 mm alveoloplasty was performed to achieve the planned final implant depth.

A NUVO ConicFIT™4.0 mm x 10 mmimplant was placed. Primary stability was achieved with insertion torque exceeding 35 N.cm.

An individually pre-fabricated healing abutment was tried in. The abutment was made of composite over a NUVO Ti-base and adjusted to fit the ideal soft tissue contours in the area.

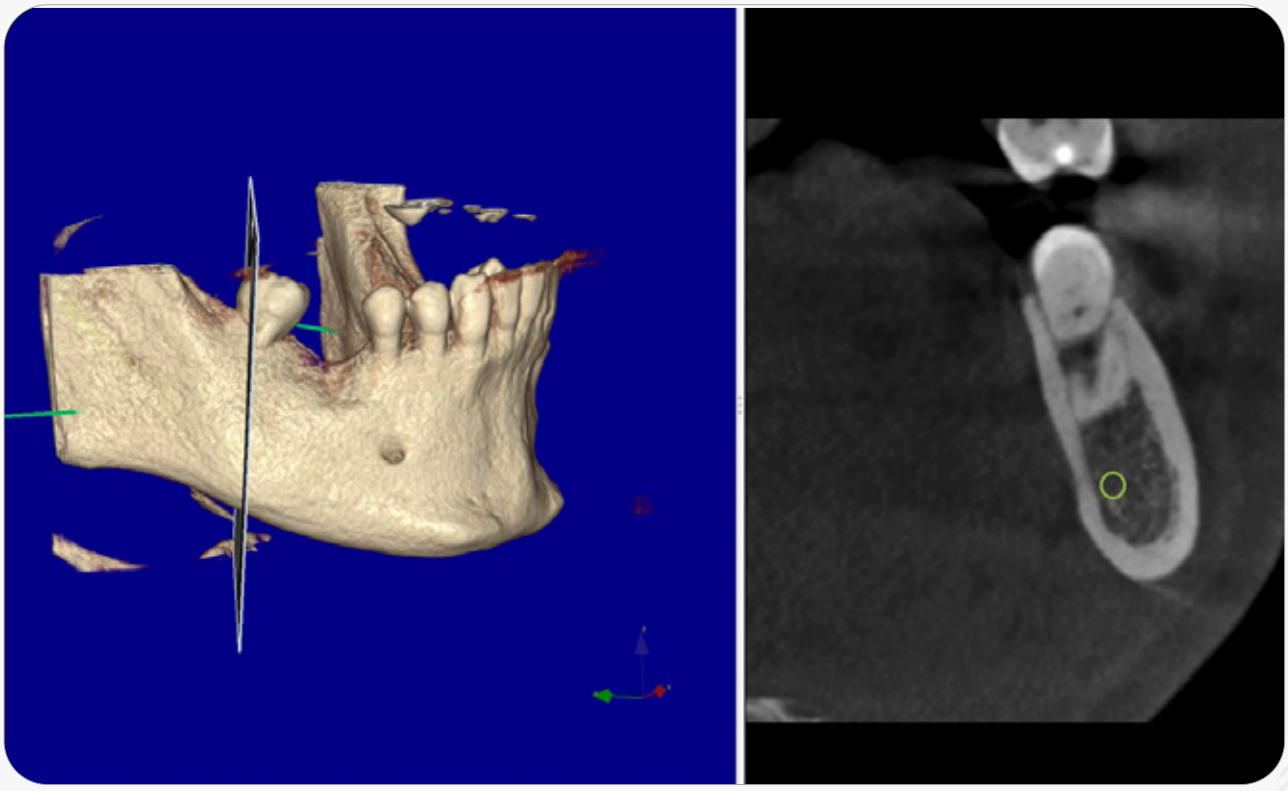
Botiss Mucoderm was placed to cover the alveolar crest on the buccal and occlusal surfaces beneath the healing abutment.

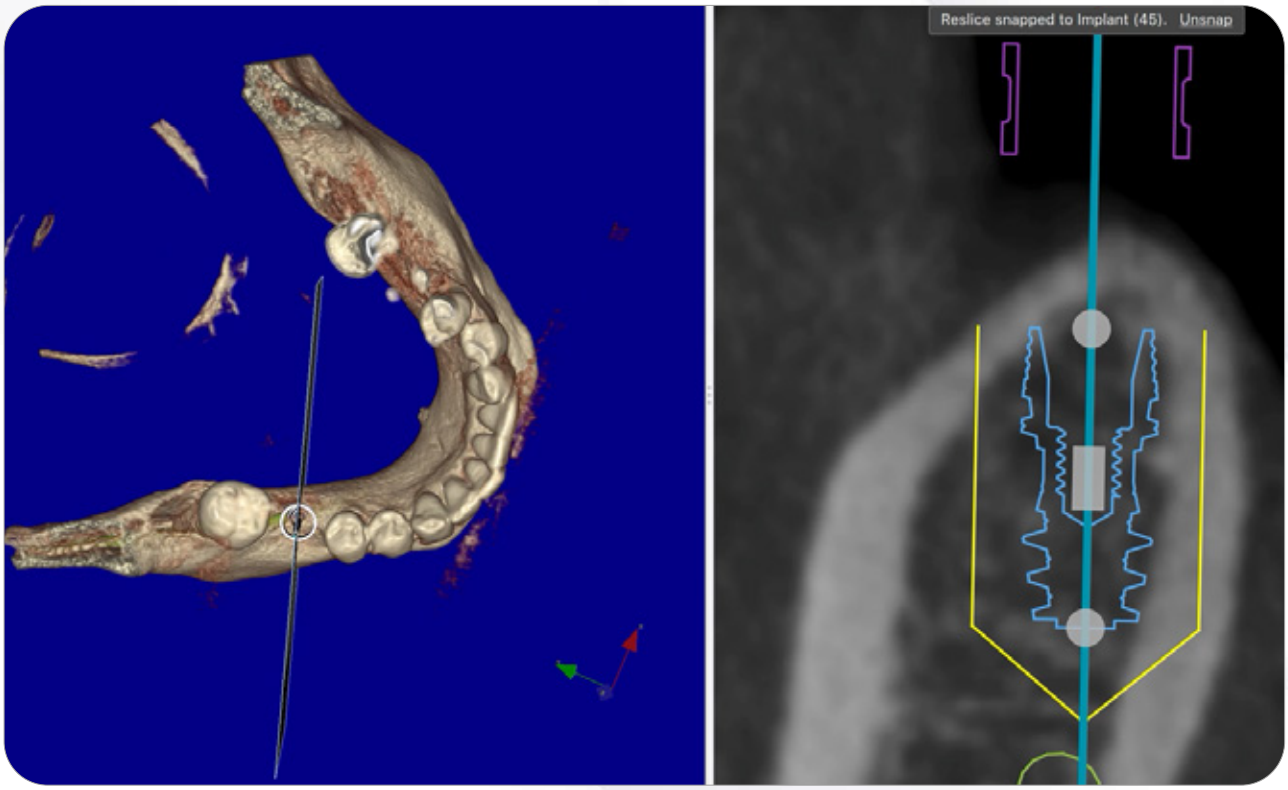
Primary closure was achieved using 4.0 Vicryl sutures.

Four months after implant placement, the healing abutment was removed and clinical examination was performed. Healing was uneventful.

A digital impression was then taken. A monolithic zirconia crown was designed using Exocad software and milled with a CAD/CAM system.

The screw-retained crown was delivered to the patient. Occlusion was carefully checked and adjusted as needed. The patient was scheduled for routine follow-up appointments.





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