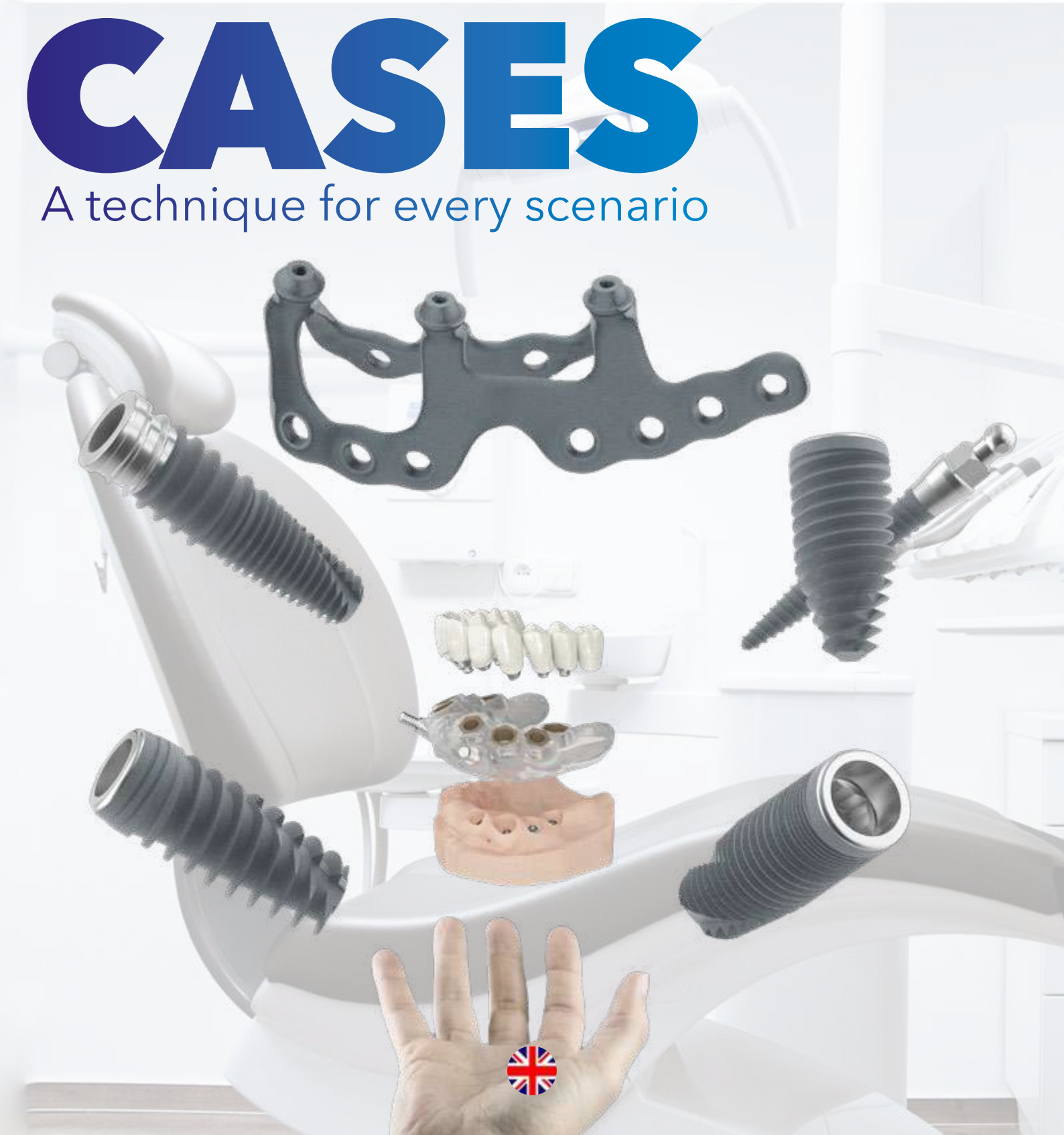
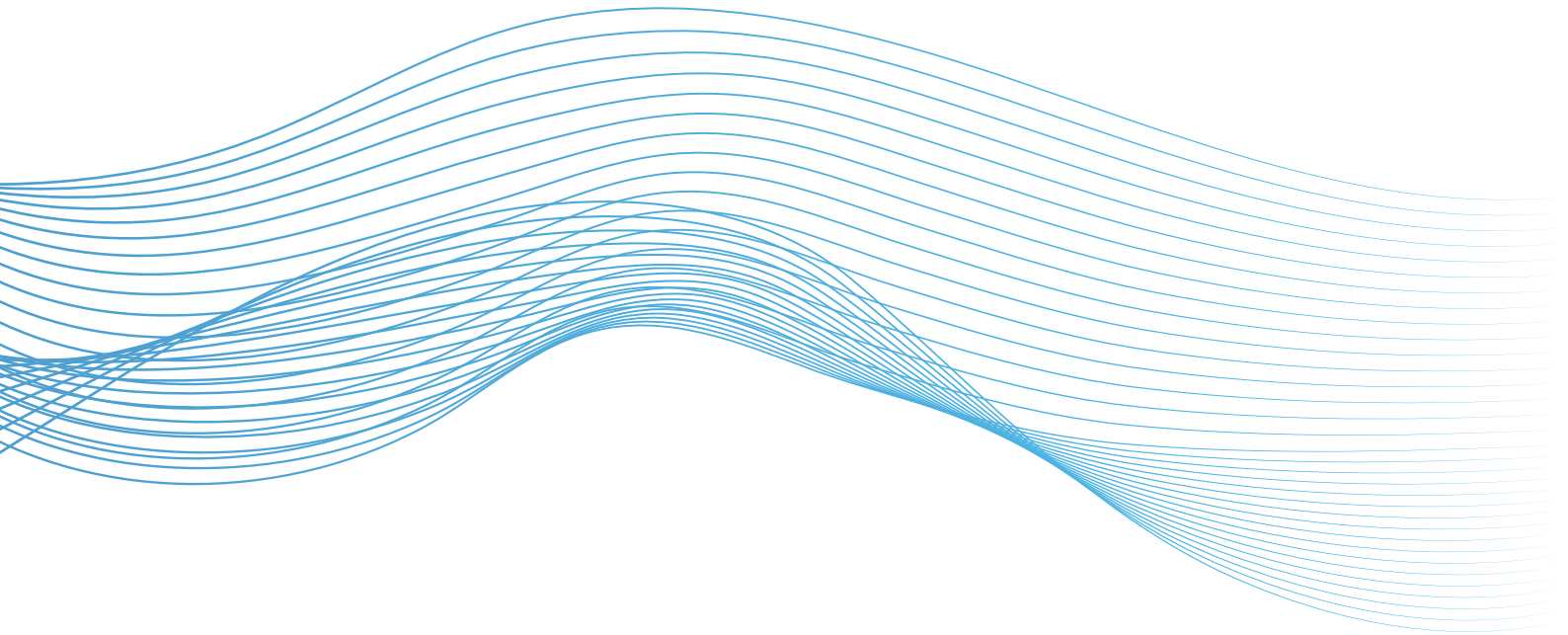
B&B DENTAL
IMPLANT COMPANY

CLINICAL CASES

A technique for every scenario





INDEX

IMPLANTOLOGY

.....1

GUIDED SURGERY

.....16

REGENERATIVE

.....31

PROSTHESES

.....51

PTERYGO

.....57

IUXTA IMPLANTS - subperiosteal

.....60

IMPLANTOLOGY

POST EXTRACTION IMPLANT SITE WITH PEEK SCREW MODIFICATION

DR. MATTIA D'AMBROSIO
ITALY

CASE DESCRIPTION

Male, 54 years old, hypertension treatment, smoker.
The patient arrives at the dentist's with element 4.6 fractured, requesting a comprehensive rehabilitation to minimise outpatient appointments.
The clinical and radiographic condition, thanks to an adequate amount of apical bone to the tooth element, makes it possible to design an extraction procedure and concomitant insertion of a B&B Dental EV post-extraction implant in accordance with the conventional surgical technique.
The type of implant designed specifically for post-extraction made it possible to achieve the appropriate stabilisation torque. The final stage of surgery was associated with a modification of the peek healing screw using a specific template and flowable composite to promote soft tissue healing with an emergence profile more in keeping with the future tooth element.
Approximately 4 months after surgery, the case was completed with a screw-retained zirconia crown with a T-base abutment (for a total of 3 appointments).

INITIAL SITUATION

INITIAL SITUATION

POST-EXTRACTION SITE

IMPLANT INSERTED IN POST-EXTRACTION SITE

PEEK SCREW ON TEMPLATE WITH SPECIAL COMPOSITE

VIEW OF THE PEEK SCREW MODIFICATION

MODIFIED PEEK SCREW

MODIFIED PEEK SCREW POSITIONED

X-RAY FOR POSITION INSPECTION

FOLLOW-UP AT 4 MONTHS TO COMPLETE THE WORK

FOLLOW-UP AT 4 MONTHS TO COMPLETE THE WORK

SOFT TISSUE AFTER PEEK SCREW REMOVAL

CROWN ON MODEL

VIEW OF CROWN ON MODEL

CROWN IN POSITION

FINAL SITUATION

LOWER ARCH REHABILITATION WITH CONOMETRIC TECHNIQUE

DR. ANDREA MASSAIU
ITALY

CASE DESCRIPTION

Male, 76 years old, unremarkable medical history.

The patient arrives at the clinic with the need to rehabilitate the lower arch with a quick, inexpensive and minimally invasive solution. During the first- and second-line physical and instrumental examinations, only a few dental elements are considered hopeless.

A fixed treatment plan on 4 immediately loaded implants (Toronto bridge) is therefore envisaged.
Surgery involves the extraction of the few remaining teeth, the opening of a mucoperiosteal flap and subsequent ostectomy and osteoplasty.

Following the insertion of 4 B&B Dental 3P implants, an immediately loaded prosthesis is delivered according to the conometric technique. The conical abutments screwed onto the head of the implants are joined with an electro-welded bar on the conical connection copings and the prosthesis is therefore lowered, completed and delivered within a few hours of the surgery.

INITIAL SITUATION

PREOPERATIVE

PRE-OP OPT

PRE-OP CB

PROCEDURE

IMPLANT INSERTION

IMPLANT INSERTION

POSITIONING OF CONOMETRIC COPINGS

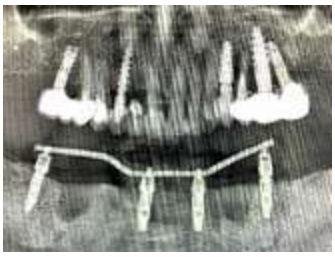
WELDING OF THE WIRE TO THE COPINGS

WELDING IN PROGRESS

WELDING COMPLETED

REBASING OF THE PROSTHESIS IN THE MOUTH

PROSTHESIS COMPLETION IN THE LABORATORY



POST-OP OPT

IMPLANTS USED

PROVISIONAL TORONTO BRIDGE LOADED 2 HOURS AFTER THE PROCEDURE

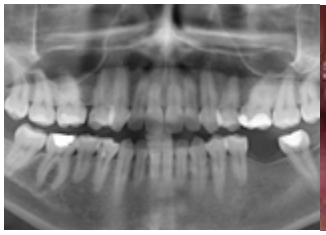
SINGLE IMPLANT WITH ANGLED PEEK ABUTMENT

DR. LINO VINICIUS PORTUGAL

CASE DESCRIPTION

A 51-year-old woman with single edentulism for over a year went to the dentist to rehabilitate the area. The physical and instrumental examination showed severe horizontal resorption and a decision was made to rehabilitate the area by avoiding further trauma and costs with a B&B Dental 3P implant angled more than 25° in the lingual direction.

After an initial healing phase, a provisional peek abutment angled at 25° was screwed in at 6 months to support a temporary crown aimed at shaping the soft tissue. After a further 3 months, the final implant is delivered in cemented zirconia on an angled titanium abutment.

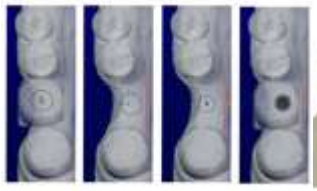


INITIAL X-RAY

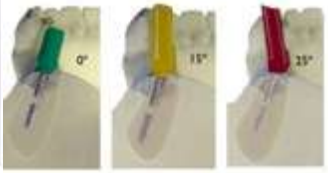
IMPLANT AND HEALING SCREW AFTER HEALING PERIOD

TITANIUM OPEN TRAY TRANSFER

PLASTER MODELS WITH SPACE MANAGEMENT



ABUTMENT DIAMETER SELECTION



CHOICE OF ABUTMENT ANGLE WITH TRY-INN

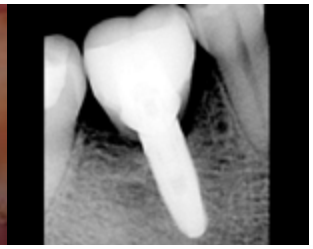
PEEK ABUTMENT WITH CORRECT ANGLE

25° PEEK ABUTMENT ADAPTATION

TEMPORARY IMPLANT

TITANIUM ABUTMENT

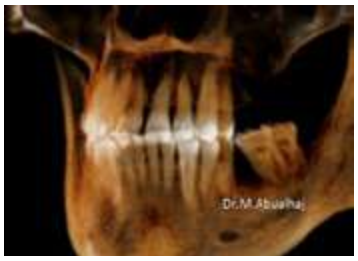
FINAL RESULT



X-RAY INSPECTION

EV IMPLANT INSERTION FOR EDENTULOUS POSTERIOR SADDLE

DR. MOHAMMAD ABUALHAJ
JORDAN



INITIAL SITUATION

CLINICAL VIEW

CASE DESCRIPTION

A 42-year-old woman presented to her dentist with edentulism in the third sextant (25 to 28) and requested rehabilitation.

The physical and instrumental examination made it possible to understand the clinical case and propose an implant-supported prosthetic rehabilitation for a total of 3 implants. There was also evidence of expansion of the maxillary sinus at the expense of the vertical bone component.

The procedure continued with the setting up of a mucoperiosteal envelope flap and insertion of 3 B&B Dental EV implants in positions 15, 16 and 17, concomitant sinus bone augmentation by using sinus compactors in a sort of compaction-expansion in diameter and depth, entering the maxillary sinus for about 0.5-1 mm.

The flap is sutured to promote submerged healing of the implants.

CLINICAL OCCLUSAL VIEW

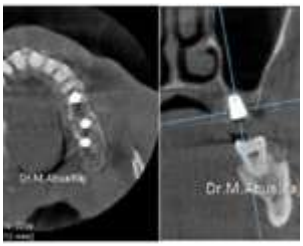
INCISION AND FLAP OPENING

EV IMPLANT INSERTION

OSTEOTOMIES

INSPECTION WITH PARALLEL PINS

IMPLANTS INSERTED



X-RAY INSPECTION OF IMPLANTS

X-RAY INSPECTION OF IMPLANTS

CONOMETRIC PROSTHETIC TECHNIQUE WITH ELECTRO-WELDED COPINGS

DR. ANDREA MASSAIU
ITALY

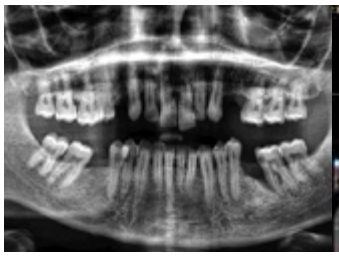
CASE DESCRIPTION

Male, 47 years old, history of hypothyroidism from thyroidectomy.

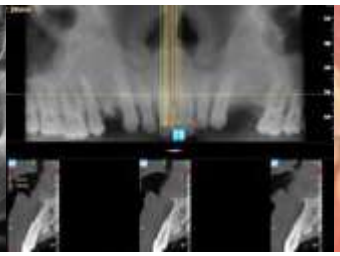
The patient visits his dentist due to severe aesthetic and functional discomfort in elements 1.1 and 2.1.

Clinical and instrumental evaluation denotes generalised periodontitis associated with an aesthetic defect.

After a phase of non-surgical periodontal therapy, immediate post-extraction loading is planned on elements 1.1 and 2.1 on B&B Dental 3P implants and loading according to the conometric prosthetic technique with electro-welded copings.



PRE-OP OPT



PRE-OP CB

PRE-OP

PROCEDURE AND IMPLANT INSERTION

CONICAL ABUTMENT POSITIONING

PARELLELISM INSPECTION

COPINGS IN PARALLEL POSITION

CONOMETRIC COPINGS

TEMPORARY IMPLANT TEST ON A CONOMETRIC BASE

IMMEDIATE LOADING ON TEMPORARY IMPLANT

POST-OP X-RAY

IMPLANTS USED

SINGLE REHABILITATION WITH CEREC SYSTEM

DR. LINO VINICIUS PORTUGAL

CASE DESCRIPTION

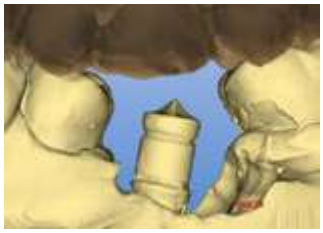
A 55-year-old patient goes to his dentist for the restoration of a single tooth gap in the third quadrant.

Physical and instrumental examination confirm the choice of treatment. A B&B Dental 3P implant is inserted, but the special feature is the prosthetic approach, which is completely chairside and digital.

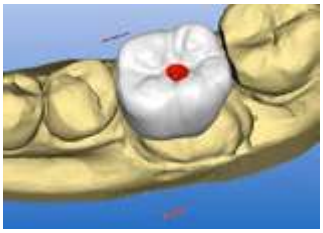
The implant is scanned with a special Cerec transfer (scan body). The digital prosthetic project is carried out in the practice and a zirconia crown with a customised Cerec-milled abutment is produced.

The case is concluded with the delivery of a cemented crown.

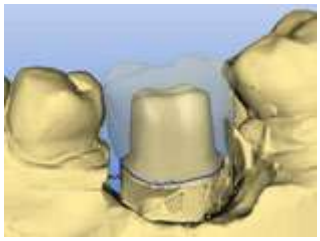
IMPLANT INSERTED



DIGITAL IMPRESSION



PROSTHETIC COMPONENT PLANNING



CREATION OF THE MILLED COMPONENT

CARRYING OUT THE AESTHETIC REHABILITATION

CUSTOM MILLED ABUTMENT INSERTION

CLOSING THE CHANNEL HOLE

CEMENTING OF AESTHETIC COMPONENT

TOOTH INSERTED

EXODONTICS, IMPLANT, TISSUE GRAFTING AND IMMEDIATE LOADING

DR. ÁLVARO RODRÍGUEZ MARTÍN
SPAIN

CASE DESCRIPTION

A 38-year-old woman goes to her dentist for an evaluation of element 11. Physical and instrumental examination reveal a tooth element that is completely fractured and therefore the cause of inflammation and periodontal phlogosis. In view of the patient's aesthetic and therapeutic demands, a minimally invasive implant rehabilitation approach with immediate prostheses are opted for.

The procedure involves an atraumatic extraction of the tooth element with surgical forceps, complete revision of the post-extraction alveolus with an alveolar spoon and antiseptic products and immediate insertion of a B&B Slim implant anchored at >30 Ncm in the apical portion of the alveolus.

Once the implant is inserted, the surgeon decides to bridge the gap between the vestibular cortex and the implant with biomaterial of heterologous origin and deliver a temporary crown screwed onto the implant head.

INITIAL CLINICAL SITUATION

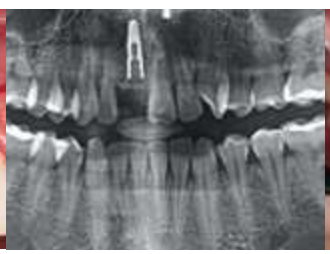
X-RAY OF INITIAL CLINICAL SITUATION

EXTRACTION OF RESIDUAL TOOTH

CYST EXTRACTION

IMPLANT INSERTION

FRONTAL GINGIVAL PROFILE



X-RAY WITH IMPLANT INSERTED

TEMPORARY RESTORATION

FIXED PROSTHESIS WITH IMPLANTS INSERTED VIA CONOMETRIC PROSTHESIS TECHNIQUE

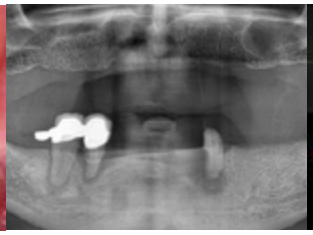
DR. ANDREA MASSAIU
ITALY

CASE DESCRIPTION

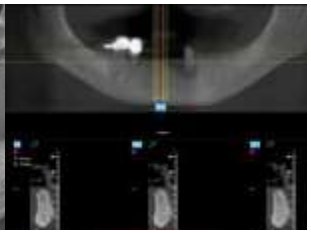
Male, 65 years old, history of hypertension.
At the first consult, the patient highlights his difficulty in using an incongruous lower skeleton.
Intraoral and instrumental physical examinations show that elements 3.3, 4.4 and 4.5 are considered hopeless and that there is an adequate amount of bone.
Considering the examinations, a treatment plan is prepared, which includes a fixed prosthesis with immediate loading on 4 B&B Dental 3P implants fixed using the conometric prosthesis technique.
The procedure involves the extraction of 3 dental elements and the insertion of 4 implants in position 3.6 - 3.4 - 4.3 - 4.6 with a tightening torque > 35 Ncm.
Once the abutments are fixed via the conometric technique, the prosthetic copings associated with these are welded with an intraoral soldering machine and the prosthesis is rebased, completed and polished for delivery.

INITIAL SITUATION

PRE-OP SITUATION



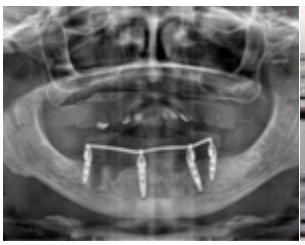
PRE-OP OPT



PRE-OP CB

CONOMETRIC COPINGS IN POSITION

SUTURES



POST-OP OPT

IMPLANTS USED

TEMPORARY PROSTHESIS

COMPLETED WORK

INSERTION OF FULL ARCH PROSTHESES WITH IMMEDIATE LOADING ON STRAIGHT IMPLANTS

DR. NACHAYEV VYACESLAV
KAZAKHSTAN

CASE DESCRIPTION

48-year-old man, history of mild grade 1 hypertension. He presents at the dentist's with bimaxillary total edentulism and a request for fixed rehabilitation.

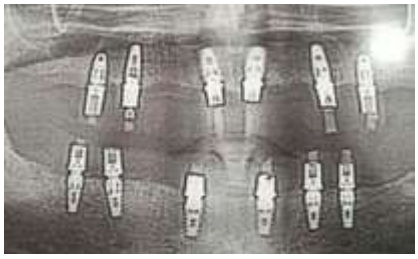
In view of the intraoral physical examination and first- and second-line instrumental examinations, a complete implant-supported prosthetic rehabilitation is opted for as agreed with the patient. The therapeutic option chosen is the placement of 6 B&B Dental 3P implants per arch and immediate temporary prosthetic loading, connected directly to the implant head with straight screwed abutments.

The surgery involves the preparation of a mucoperiosteal flap and insertion of the 6 straight implants according to standard freehand surgical protocol.

X-RAY INSPECTION

TEMPORARY PROSTHESES - UPPER AND LOWER ARCH

FINAL CLINICAL VIEW BEFORE CLOSING THE SCREW HOLE



X-RAY PROSTHESIS INSPECTION

LATERAL VIEW

FINAL CLINICAL VIEW

FREE SADDLE REHABILITATION WITH EV IMPLANT

DR. ZAID HANIBALI
JORDAN

CASE DESCRIPTION

A 46-year-old woman went to her dentist requesting fixed prosthetic rehabilitation of edentulous areas.

On physical and instrumental examination, the patient presented partial edentulism at the level of the fourth sextant (from element 35 to 37).

The definitive treatment plan provided for a deferred loading implant-prosthetic rehabilitation by means of a bridge on implants (position 35 and 37).

The first, surgical phase involved the execution of a mucoperiosteal flap and the insertion of 2 B&B Dental EV implants according to the standard protocol. The implant insertion torque allowed the simultaneous screwing of the healing screw on the distal implant and the cover screw on the mesial implant.

The uncovering of the implant in position 35 occurred about 5 months later. After about 20 days, the prosthetic phase continued:

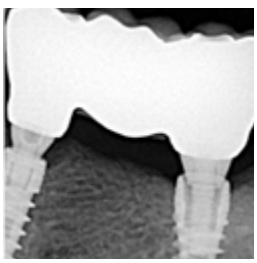
- Precision analogue impression in accordance with the tear-off technique, subsequent testing of the framework and lastly delivery of the final zirconia bridge screwed onto the implants.

HEALING SCREW AND SUBMERGED IMPLANT - 8 MONTHS HEALING TIME

FACILITY TRANSFER - PLASTIC CAP

ANALOGS INSERTED IN THE TWO TRANSFERS

PROSTHESES IN POSITION



X-RAY INSPECTION FOR PROSTHESES PLACEMENT

FUNCTIONAL AESTHETIC RECOVERY OF UPPER INCISORS USING THE CONOMETRIC TECHNIQUE

DR. ANDREA MASSAIU
ITALY

CASE DESCRIPTION

Female, 47 years old, unremarkable medical history. The patient went to her dentist with a desire for functional aesthetic recovery of the incisors of the second sextant.
On intraoral and instrumental physical examination, there were signs of periodontitis associated specifically with third degree mobility of the upper incisors, which also had severe occlusal trauma.
After an initial non-surgical periodontal treatment plan, the recovery of the frontal sector is planned with extraction of elements 1.2 to 2.2 and simultaneous insertion of 2 B&B Dental 3P implants and immediate loading using the conometric abutment technique.
Specifically, the 4 teeth are extracted and the two implants are inserted in position 1.2 and 2.2 with a screwing torque > 35 Ncm.
The two abutments are screwed onto the head of the implants via a taper connection, on which the two copings will be placed via friction of the two walls with a special hammer.
The two copings are joined with metal wire by means of an intraoral electrowelding machine.
The final stage involves rebasing, completing and delivery of the temporary prosthesis for immediate loading.

IMPLANT INSERTION

COPING PLACEMENT

PROSTHETIC COPINGS ON TAPERED ABUTMENTS

ELECTROWELDING

FIXING OF COPINGS WITH BAR

PROSTHESIS

FINAL RESULT

PEEK ABUTMENT REHABILITATION

DR. LINO VINICIUS PORTUGAL

CASE DESCRIPTION

A young 39-year-old patient presented to her dentist to have her missing element 14 restored. In accordance with the physical and instrumental examination, a B&B Dental EV implant was inserted according to the free-hand protocol and left to heal for 4 months with a peek healing screw.

After this initial healing period, a straight peek abutment is screwed onto it, on which a digital impression is then taken for the fabrication of a cemented zirconia crown on the same abutment that was left in place.

HEALING SCREW IN POSITION

IMPLANT INSERTED

PEEK ABUTMENT IN POSITION

PEEK ABUTMENT ADAPTATION

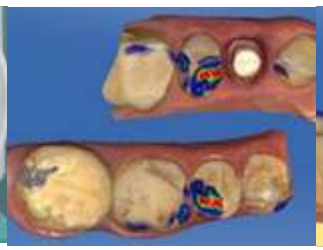
ADAPTED PEEK ABUTMENT IN POSITION

OCCLUSAL VIEW

X-RAY FOR CONNECTION INSPECTION

SCREW CHANNEL CLOSURE

DIGITAL IMPRESSION



DENTAL TECHNOLOGY IMPRESSION

CAPSULE CREATION

FINAL RESULT

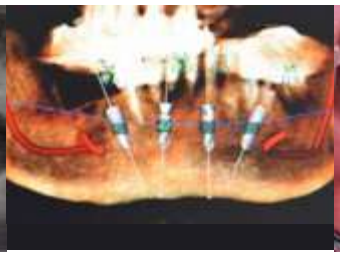
STABILISATION BAR ON MUA WITH ARCH GUIDE

DR. FABIO MANUEL FILANNINO
ITALY

CASE DESCRIPTION

A 65-year-old man asks his dentist for stabilisation of a mobile lower total prosthesis. Considering the instrumental factors and physical examinations, the dentist opts for stabilisation via a milled MUA-bonded bar on 4 implants.
The surgery is planned on Cone Beam CT and is performed using the all-on-4 concept involving the insertion of four implants, the two distal ones are inclined at 30 degrees so as to avoid the inferior alveolar nerve.
The procedure is performed by means of flapless surgery and using B&B's all-on-4 guide to insert the implants at the appropriate angle.
Once the 4 B&B Dental 3P implants are inserted, the 4 healing screws are screwed in and the implants are left to heal without load.
Four months later, when healing is complete, the screws are replaced with MUAs on which the prosthesis fixation bar is modelled.

INITIAL SITUATION

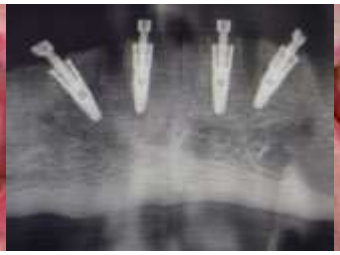


IMPLANT INSERTION PLANNING

ARCH IN PLACE

PREPARATION WITH DRILLS AND STOPPERS

IMPLANTS INSERTED WITH HEALING SCREWS



X-RAY INSPECTION

PROSTHESES IN POSITION

HEALING AFTER 4 MONTHS

DUPLICATE PROSTHESIS INSPECTION

X-RAY INSPECTION AFTER 4 MONTHS

PROSTHETIC FIXATION BAR ON MUA

FINAL RESULT

UPPER INCISOR REHABILITATION WITH CONOMETRIC PROSTHETIC TECHNIQUE

DR. ANDREA MASSAIU
ITALY

CASE DESCRIPTION

Female, 45 years old, unremarkable medical history.

The patient arrives at the first consult with the urgent need of stabilising the situation in the two upper central incisors.
On physical and instrumental examination, severe grade-3 mobility due to periodontal disease is evident.
After initial non-surgical therapy and splinting of the two teeth, there are no signs of improvement.
Therefore, we plan a single-session operation of extraction of the two dental elements, simultaneous insertion of 2 B&B Dental 3P implants supported by high torque, delivery of two immediately loaded provisional crowns according to the conometric prosthetic technique and their intraoral electro-welding.

UPPER INCISOR EXTRACTION

TAPERED ABUTMENTS IN POSITION

POSITIONING OF TAPER COPINGS

ELECTROWELDING

CROWNS

FINAL SITUATION

POST-SURGICAL INSPECTION

GUIDED SURGERY

MINI IMPLANTS IN GUIDED SURGERY

DR. IOANA DATCU
ITALY

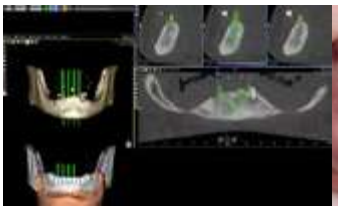
CASE DESCRIPTION

A 90-year-old patient presented with an edentulous jaw (the root of the left lower canine was still present) that required prosthesis stabilisation. A Cone Beam CT scan was performed to establish the bone volume and obtain an accurate 3D image of the mandibular architecture. Planning software was used to plan the case and enabled virtual implant placement to achieve optimal implant positioning. In line with the MDI protocol, these implants were planned to be placed in the interforaminal region.

In this case, it was determined that four MDIs with a diameter of 2.1 mm and a length of 13 mm would be the most suitable implants to maintain and stabilise the existing prosthesis.
The surgical template was designed and verified using software and produced by the dental laboratory incorporating four guide bushings. Two additional lateral bushings were incorporated into the lip area of the guide to allow it to be fixed laterally, should it be necessary during surgery.

The surgical procedure began with the extraction of the canine root. The template was then positioned and the osteotomies created. Each osteotomy was performed to a depth of 10 mm. The implants were then placed in sequence.

In this case, the patient's existing prosthesis was adapted to be fixed by the implants. The dental dam was placed over the implant heads to protect the soft tissue. The accommodating slots were placed on the O-ball heads. Cold-cure polymerization acrylic was applied to the recess of the prosthesis base and the prosthesis was placed in the patient's mouth.



VIRTUAL IMPLANT PLACEMENT

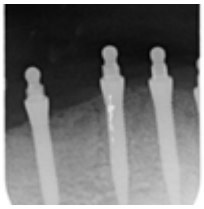
SURGICAL TEMPLATE PLACEMENT

OSTEOTOMY PREPARATION AND CRESTAL FIXATION WITH DRILL

INITIAL IMPLANT INSERTION

BUTTERFLY DRIVER FOR IMPLANT INSERTION

IMPLANT INSERTION WITH TORQUE RATCHET



X-RAY INSPECTION FOR IMPLANT POSITIONING

THE FOUR IMPLANTS INSERTED

IMPLANT PREPARATION FOR PROSTHESIS ADAPTATION

ADAPTATION OF EXISTING PROSTHESIS ON IMPLANTS

ACRYLIC APPLIED TO PROSTHESIS

RE-WORKING THE PROSTHESIS FOR FINAL INSERTION

IMPLANT PLACEMENT WITH IMPROVED OFFSET IN GUIDED SURGERY

DR. FRANCISCO LAITA BALDA
SPAIN

CASE DESCRIPTION

A 42-year-old man arrived at the dentist due to severe bleeding and generalised pain.
At the first line physical and instrumental examination there was evidence of severe loss of periodontal attachment and generalised second and third grade tooth mobility.
After an initial diagnosis of periodontitis, a treatment plan was drawn up that included periodontal treatment in the upper jaw, while for the lower jaw the dental elements were deemed non-recoverable and therefore an immediate load implant rehabilitation was planned according to the all-on-4 protocol, taking advantage of the properties of B&B Dental guided surgery.
The surgery involved an initial design and construction phase of the surgical template in accordance with the following steps:
1. Precision impression for producing the radiographic templates
2. Cone Beam CT performed while the patient had the radiographic template on
3. Surgical design using B&B Dental software (matching of Dicom files from Cone Beam CT scanning and STL files from scanning models as well as models + X-ray template made in the dental laboratory)
4. Printing of the surgical template, surgical plan and final model for the selection of MUAs and fabrication of the temporary prosthesis.

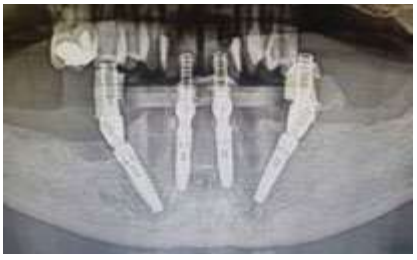
In this case, surgery was performed using the dedicated guided surgery kit and the special additional kit (offset +2 and +4) consisting of longer burs.
The choice of this additional device allowed for the insertion of longer implants in the presence of a greater soft tissue height.
The surgical procedure was completed with the insertion of four implants:
Position 3.4: B&B Dental EV 4x16 insertion torque >35 Ncm and 30° inclination
Position 3.2: B&B Dental EV 4x14 insertion torque >35 Ncm
Position 4.2: B&B Dental EV 4x14 insertion torque >35 Ncm
Position 4.4: B&B Dental EV 4x16 insertion torque >35 Ncm and 30° inclination
The prosthetic load is thus completed within a few hours, stabilising the prosthesis with turrets screwed onto the previously chosen MUAs.

PRE-OPERATIVE CLINICAL VIEW

SURGICAL TEMPLATE ON MODEL

ALL-ON-4 PROSTHESIS ON MODEL

LOWER ALL-ON-4 PROSTHESIS IN POSITION



FINAL IMPLANT PLACEMENT

X-RAY IMPLANT POSITION INSPECTION

GUIDED SURGERY OF 4 IMPLANTS WITH EXTRACTION AND IMMEDIATE LOADING

DR. ALESSANDRO CECCHERINI
ITALY

CASE DESCRIPTION

A 56-year-old woman, unremarkable medical history, arrived at her dentist's with obvious functional and aesthetic difficulties in the upper jaw.

Intraoral clinical and instrumental x-ray examination shows the upper dental arch partially dentulous (residual elements 1.5 - 1.3 - 1.2)

Taking into account the patient's examinations and requests, a treatment plan was prepared that includes a complete dental restoration and the simultaneous placement of 4 B&B Dental implants according to the guided surgery protocol with immediate prosthetic loading.

During the planning of the procedure, virtual extraction of the teeth will be performed using the specific software in order to create a template with full mucosal support and lateral fixation with pins.
The surgery performed according to the B&B Dental guided protocol for D3/D4 bone allows for the subsequent fixation of the temporary prosthesis by using two MUAs as an intermediate prosthetic component on the posterior implants and two rotational titanium temporary abutments on the two central implants.

Surgery was concluded by filling the post-extraction alveoli with collagen and suturing.

EXTRACTION OF EXISTING TEETH

EXTRACTION SITE CLEANING

INITIAL DRILL

FINAL BUR

IMPLANT INSERTION

DRIVER IN POSITION

MOUNTER IN POSITION

ABUTMENTS AND MUA INSERTED INTO THE IMPLANT

FILLING THE ALVEOLI WITH COLLAGEN AND SUTURING

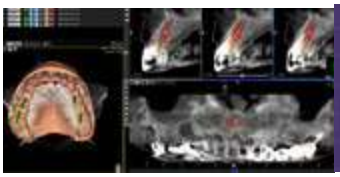
FINAL RESULT

DIGITAL WORKFLOW: GUIDED SURGERY AND IMMEDIATE TEMPORARY LOADING

DR. FERDINANDO ATTANASIO
ITALY

CASE DESCRIPTION

A 58-year-old patient went to the dentist due to circular bridge instability on natural teeth. On physical and instrumental examination, the dentist found a complete loss of healthy tooth structure in the abutments. He therefore opted for dental restoration and the simultaneous insertion of 6 immediately loaded B&B Dental implants.
The procedure was completely designed in guided surgery according to the B&B Dental protocol. The design of the final implant position allowed the doctor to design and print, via the B&B Dental milling centre, the temporary prosthesis by already positioning the emergency holes of the implant abutments.
This approach drastically reduced chair time and consequently reduced surgical invasiveness and patient discomfort.
The procedure was performed with immediate post-extraction insertion of the implants using flapless guided surgery.



DIGITAL PLANNING OF THE IMPLANTS

DIGITAL MODEL WITH PROSTHESIS

MASTER MODEL AND PROSTHESIS

MODEL, ABUTMENTS, SURGICAL TEMPLATE AND PROSTHESIS

INITIAL SITUATION

RESIDUAL TEETH

EXTRACTION

IMPLANTS AND ABUTMENTS INSERTED

POST-OP PROSTHESIS

FINAL RESULT

FULL ARCH IN GUIDED SURGERY

DR. MATTIA D'AMBROSIO
ITALY

CASE DESCRIPTION

Male, 47 years old, unremarkable medical history. The patient came to the dentist urgently because of diffuse pain in the oral cavity and the presence of recurrent abscesses.

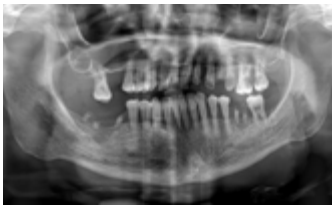
Physical examination showed the presence of generalised periodontitis with grade 3 tooth mobility, fractured teeth and destructive caries. The patient wished to resolve the acute pathology and rehabilitate the dental arches with minimally invasive and cost-effective fixed solutions.

In view of the physical examination and the patient's request, an initial phase of dental restoration of both arches and healing with the use of temporary removable dentures was envisaged.

The second phase involved double implant surgery according to the all-on-4 protocol (no loading) using the B&B Dental guided surgery protocol with a flapless approach.

After performing a Cone Beam CT scan with x-ray templates, the digital surgical design was carried out with specific software and then two templates with pin fixation protocols were printed.

Four B&B Dental implants were placed per arch with the use of off-set +2 mounters in the presence of greater height of the soft tissue. Prosthetic loading will take place approximately four months after surgery.



OPT FIRST APPOINTMENT

EDENTULOUS UPPER ARCH 3 MONTHS AFTER EXTRACTION

EDENTULOUS LOWER ARCH 3 MONTHS AFTER EXTRACTION

UPPER SURGICAL TEMPLATE

LOWER SURGICAL TEMPLATE

FIXED UPPER SURGICAL TEMPLATE

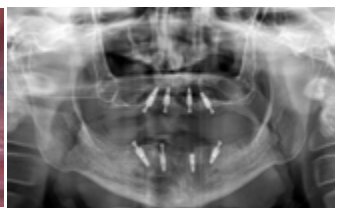
FIXED LOWER SURGICAL TEMPLATE

UPPER TEMPLATE WITH IMPLANTS IN PLACE (MOUNTER)

LOWER TEMPLATE WITH IMPLANTS IN PLACE (MOUNTER)

POST-OP UPPER ARCH

POST-OP LOWER ARCH



OPT POST-OP

ALL-ON-4 ON MUA IN GUIDED SURGERY

DR. ANGELO BANZI
ITALY

CASE DESCRIPTION

A 60-year-old female patient with an upper removable prosthesis wanted a different design with a fixed total prosthesis to reduce the discomfort of a mobile solution with an extended palate.
The physical and instrumental examination showed the possibility of implementing an all-on-4 implant-prosthetic design by exploiting the bone component anterior to the maxillary sinuses and thus being able to load a temporary fixed prosthesis in resin (Toronto-type).
The surgery was also designed according to the B&B Dental guided surgery protocol and the prosthetic component prepared based on the digital protocol.
The surgery was performed in a flapless manner with the surgical template properly secured with vestibular retention pins.
Once the 4 B&B Dental EV implants were inserted with a torque >30 Ncm, the intermediate straight and angled MUA abutments were connected and the temporary prosthesis was fitted on the same day as the surgery.

INITIAL X-RAY

INITIAL SITUATION WITH MOBILE PROSTHESIS

IMPLANT PLANNING

THE SURGICAL TEMPLATE

PRINTED MODEL WITH MUA INSERTION

PROSTHESIS ABUTMENTS MUA

POSITIONING THE SURGICAL TEMPLATE IN THE MOUTH

CRESTAL FIXATION

IMPLANT INSERTION IN THE DISTAL POSITION

DISTAL IMPLANT INSERTION WITH MOUNTER

IMPLANTS IN PLACE

FINAL X-RAY INSPECTION

MUA POSITIONING ON IMPLANTS

MUA PROSTHETIC ABUTMENT INSERTION

FINAL SITUATION

FINAL PALATAL VIEW

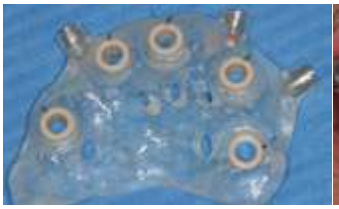
IMMEDIATE LOADING IN GUIDED SURGERY USING PRE-EXISTING PROSTHESIS

DR. FRANCESCO LERARIO
ITALY

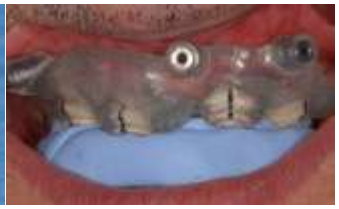
CASE DESCRIPTION

A 44-year-old patient came to the dentist after several consultations to solve a problem of total upper edentulism rehabilitated with an incongruous total mobile prosthesis.

The physical and instrumental examination allowed for the design of a fixed treatment plan on 5 B&B Dental EV 4x12 mm implants and immediate loading by modifying the mobile prosthesis that was already in the patient's possession. The procedure was scheduled in flapless guided surgery according to the B&B Dental protocol and avoiding any type of incision.



SURGICAL TEMPLATE



SILICONE KEY TO HOLD THE TEMPLATE IN PLACE FOR FIXING

PIN PLACEMENT

IMPLANT INSERTION

IMPLANT INSERTED WITH MOUNTER AND VIEW OF THE BUR

MUA IN POSITION

MUA ABUTMENTS AND PROSTHESIS ADAPTATION

ABUTMENTS IN POSITION

TEMPORARY FINAL PROSTHESIS

FINAL POST-OP RESULT

GUIDED SURGERY WITH IMMEDIATE LOADING

DR. ANDREA PACIFICI
ITALY

CASE DESCRIPTION

An 87-year-old patient came to the dentist with the specific request of increasing the chewing comfort of her almost completely edentulous lower jaw. Considering the physical and instrumental examination and the patient's age, we opted for an implant-supported prosthetic rehabilitation with immediate loading and guided flapless surgery.

The case design was done through the B&B Dental guided protocol. After making an X-ray template with radiopaque balls, a Cone Beam CT scan was performed with the template blocked with a silicone bite; the surgical design was executed with specific software and matched with the STL files of the scanned models in the laboratory.

INITIAL SITUATION

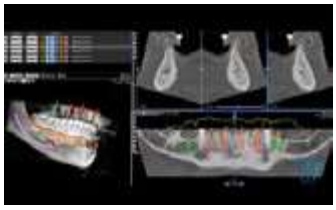
MODEL IN ARTICULATION

SILICONE BITE

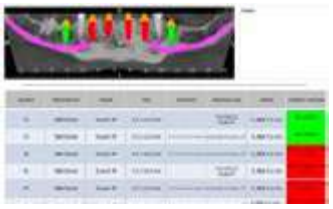
MODEL WITH RADIOLOGICAL TEMPLATE AND SILICONE BITE

RADIOLOGICAL TEMPLATE AND SILICONE BITE IN PLACE

CBCT WITH RADIOPAQUE MARKERS



DESIGN PHASE



DESIGN REPORT

IMPLANT INSERTION

IMMEDIATE FULL ARCH LOADING WITH OSTEOPLASTY

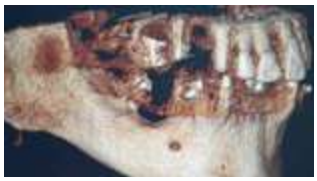
DR. FABIO MANUEL FILANNINO
ITALY

CASE DESCRIPTION

A 64-year-old man came to the dentist with terminal lower jaw dentition. The physical and instrumental examination and the patient's requests directed the therapeutic choice towards an immediately loaded implant-supported total prosthesis. However, the Cone Beam CT scan showed the need for a generous coronal osteoplasty to place 7 B&B Dental 3P implants in abundant stabilising bone.

Therefore, a guided surgery was designed with a modular template to guide the subtractive osteoplasty in the first phase and then the insertion of the implants, which were then connected to customised abutments onto which the temporary prosthesis was cemented.

INITIAL X-RAY



DICOM WITH RADIOPAQUE MARKERS

DICOM WITH RADIOPAQUE MARKERS

TEMPLATE FOR POSITIONING PINS

OSTEOPLASTY TEMPLATE

SURGICAL TEMPLATE

MODEL WITH CUSTOMISED ABUTMENTS

MODEL WITH TEMPORARY PROSTHESIS

OPENING OF FLAPS AFTER EXTRACTION

SURGICAL TEMPLATE IN PLACE

IMPLANTS AND MOUNTERS INSERTED

ABUTMENTS INSERTED ON IMPLANT

PROSTHESIS

FINAL X-RAY INSPECTION

ALL-ON-6 IN GUIDED SURGERY

DR. ALESSANDRO CECCHERINI
ITALY

CASE DESCRIPTION

A 49-year-old man came to the dentist as he had mobile total upper dentures and a desire to replace them with a fixed prosthesis.

On first and second line intraoral and instrumental physical examination, a completely edentulous upper arch was observed in the presence of a well-represented bone component that allowed for the placement of osseointegrated implants without further regenerative bone manoeuvres.
The surgeon planned a minimally invasive surgery according to the B&B Dental guided surgery protocol in flapless mode for the insertion of 6 implants and immediate prosthetic loading.

The surgical and prosthetic steps included:

1. The design of the surgical template by matching radiological DICOM files (derived from the Cone Beam CT scan performed with radiological template) and STL files of the soft tissue and virtual diagnostic wax-up
2. Surgery in the flapless mode using a mucosa-supported template appropriately fixed with lateral pins and crestal stabilisation pins 2.1. Specifically, the protocol included: soft tissue bur, levelling bur, lanceolate bur, crestal preparation burs, implant body length preparation burs with increasing diameter, manual compactors only in posterior areas with D3/D4 bone type
3. Six B&B Dental 3P implants were inserted with a specific mounter at a minimum torque of 35 Ncm
4. Six straight MUAs were screwed onto the head of the implants at a torque of 25 Ncm
5. The temporary resin prosthesis, suitably prepared on the basis of the stereolithographic model printed from the initial design, was clinically fixed with plaster to the screwed-in turrets on the MUAs
6. Completion, occlusal retouching and final fitting of the temporary prosthetic.

The use of guided surgery and design software made it possible to increase precision and reduce surgical and prosthetic times, thus facilitating the clinical workflow and the patient's post-operative well-being.

MUCOTOME AND MUCOUS MEMBRANE INCISION

FIXING PIN

LANCE DRILL AND COMPACTORS

IMPLANTS INSERTED

MUA AND ABUTMENTS IN PLACE

FINAL RESULT

SLIM IMPLANT INSTALLATION IN GUIDED SURGERY IN THE AESTHETIC AREA

DR. MARCO ROY
POLAND

CASE DESCRIPTION

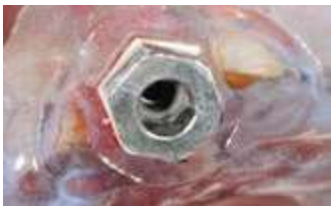
A 38-year-old woman with an unremarkable medical history went to the dentist for an aesthetic-functional request.
Intraoral and instrumental physical examination revealed the absence of the 2.2 element, which was avulsed at a young age due to trauma.
Given the significant aesthetic demand and the limited prosthetic space, the insertion of a B&B Dental SLIM implant (3 mm diameter) with immediate loading using guided surgery (B&B Dental protocol) was planned.
The surgery involved an initial design and construction phase of the surgical template in accordance with the following steps:
1.Cone Beam CT scan of the patient's arch
2.Precision imprint for model production
3.Surgical design using B&B Dental software (matching of DICOMs from Cone Beam CT scan and STLs from the model scan performed in the dental laboratory)
4.Printing of the surgical template and surgical project.
The procedure was carried out using flapless guided surgery to reduce invasiveness and post-surgical problems.
An immediately loaded provisional crown was also delivered, which was replaced by an aesthetic cemented zirconia crown at 4 months.

INITIAL SITUATION

SURGICAL TEMPLATE IN PLACE

OPENING OF THE MUCOSA

IMPLANT INSERTION WITH TEMPLATE

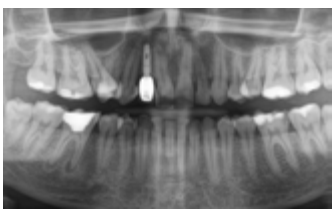


MOUNTER IN POSITION

CUSTOMISED ZIRCONIA ABUTMENT

CROWN IN POSITION

CLINICAL VIEW WITH CROWN IN POSITION



FINAL X-RAY WITH IMPLANT IN PLACE

MAXILLARY ARCH REHABILITATION IN GUIDED SURGERY

DR. ANGELO BANZI
ITALY

CASE DESCRIPTION

45-year-old male, unremarkable medical history, occasional smoker.
The patient went for a first consult at his dentist's with a strong desire to rehabilitate the maxillary arch, avoiding further extractions.
Intraoral physical examination showed the presence of the following residual dental elements: 1.7 - 1.1 - 2.1 - 2.5 - 2.7, in the presence of destructive caries.
The first-line instrumental radiographic examination showed the adequate interdental bone support and the amount of residual bone in the edentulous areas.
Considering the clinical aspects and the patient's needs, a treatment plan was drawn up that included: the preservation, devitalization and filing of the remaining dental elements, the insertion of 5 implants in positions 1.5 - 1.4 - 1.3 - 2.4 - 2.5 by means of guided surgery, and the delivery of an immediate temporary prosthesis 1.7 to 2.7 connecting teeth and implants.
Specifically the sequence of design and implementation was as follows:

1. Alginate impression for STL production (with laboratory scan) and radiographic template
2. Cone Beam CT of the arch performed with the patient wearing the radiographic template in the presence of 5 radiopaque markers
3. Digital case design according to B&B Dental's protocol: DICOM file matching, STL (of soft tissue and digital diagnostic wax-up), virtual insertion of the 5 implants, choice of temporary prosthetic abutments, fabrication of the surgical template
4. Laboratory printing of the surgical template with dental and mucosal support; fabrication of the immediately loaded temporary prosthesis
5. Surgery day: surgery performed according to B&B Dental protocol for D3/4 bone, in flapless mode and with crestal stabilisation pin
6. Insertion of 5 B&B Dental 3P implants with insertion torque > 35 Ncm
7. Filing of residual teeth
8. Screwing of abutments for temporary prosthesis cemented onto implant heads
9. Delivery of the immediately loaded temporary prosthesis following appropriate rebasing, finishing and polishing.

INITIAL SITUATION

IMPRESSION

PLASTER MODEL

RADIOGRAPHIC TEMPLATE

RADIOGRAPHIC TEMPLATE IN POSITION

CONE BEAM CT WITH TEMPLATE

MATCHING ON GUIDED SOFTWARE FROM B&B DENTAL

SURGERY PLANNING

SURGICAL TEMPLATE

MODEL WITH PROSTHESIS

MODEL WITH ANALOGUES AND ABUTMENTS

SURGICAL TEMPLATE IN PLACE

MUCOTOME

BONE PROFILER

LANCE DRILL

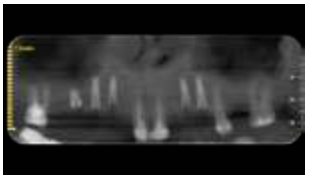
TEMPLATE CLAMPING WITH CRESTAL PINS

SURGERY WITH DRILLS

IMPLANT INSERTION

IMPLANTS INSERTED

FINAL RESULT



FINAL X-RAY INSPECTION

AESTHETIC NEED RESOLVED IN GUIDED SURGERY

DR. FABIO SCARANO CATANZARO
ITALY

CASE DESCRIPTION

Male, 35 years old, unremarkable medical history. The patient goes to the dentist with the aesthetic need of improving the harmony of his smile.
Intraoral and instrumental physical examination shows diffuse tooth crowding and agenesis of elements 1.2 and 2.2 is also noted.
Therefore, the treatment plan includes a first phase of orthodontic therapy to realign the dental elements and create the adequate prosthetic space for the insertion of two implants in position 1.2 and 2.2.
The operation is planned with flapless guided surgery according to the B&B Dental method for D3 bone and immediate prosthetic loading.

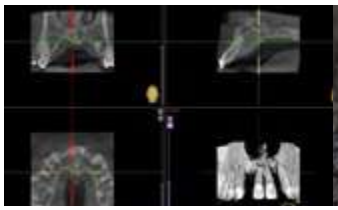
The planning of the surgery on dedicated software following the matching of DICOM files of the bone component and STL files of the mucosal component involves the use of B&B Dental 3P 3.5x12 implants with the use of +2 mounters and therefore 2 mm longer burs.
After insertion, a 17° angled abutment for cemented prosthesis is screwed onto the head of the implants, followed by rebasing and cementing of the two temporary prostheses.

INITIAL SITUATION

INITIAL SITUATION

PALATAL VIEW

LATERAL VIEW



SURGERY PLANNING

SURGICAL TEMPLATE

SURGICAL TEMPLATE IN PLACE

MUCOTOME

LANCE DRILL

MILLING FOR IMPLANT SITE CREATION

IMPLANT INSERTION

IMPLANTS INSERTED

CUSTOMISED ABUTMENTS

FINAL RESULT

REGENERATIVE

INSERTION OF TYPE III SOCKET IMPLANT AND MAXILLARY SINUS PNEUMATIZATION

DR. ABDUSALAM E. ALRMALI
LIBYA

CASE DESCRIPTION

A 48-year-old woman went to the dentist with a rehabilitation request.

On first and second line physical and instrumental examination, the patient was found to be partially edentulous in the first/second sextant (missing 15-14-12); furthermore, elements 16 and 13 were deemed to be lost.

On close radiographic examination, element 16 showed a well-presented inter-radicular bone septum despite the presence of a heavily pneumatized maxillary sinus.

After evaluating all clinical and radiographic parameters, an implant-prosthetic rehabilitation with B&B Dental Wide implants in position 16, B&B Dental EV in position 13 and a ceramic bridge with a cantilever element in position 12 was decided upon.

The surgical choice involved placing the implants in the immediate post-extraction socket. A mucoperiosteal flap and tooth extraction was performed in an atraumatic manner.

The implant site was prepared using a standard technique with the addition of bone densification drills to increase bone quality. Implant placement was followed by filling the gap of the alveolar defect with heterologous bone granules mixed with PRF (platelet rich fibrin) and covering the defect with a connective graft pedicled from the palate.

Suturing with 4-0 nylon thread allows the two defects to be closed tightly.

INITIAL CLINICAL SITUATION

INITIAL CLINICAL SITUATION

ASSESSMENT OF BONE THICKNESS

CBCT SCAN

EXTRACTION OF EXISTING TEETH

PREPARATION OF OSTEOTOMIES AND INSERTION OF REGENERATION MATERIAL

IMPLANT INSERTION

CTG PREPARATION

CTG IN POSITION

SUTURES

BONE REGENERATION AND PRF IN PARTIALLY EXPOSED IMPLANT PLACEMENT


PROF. DR. NAIDA SULEJMANAGIC HADZIABIC - DR. NEDIM SULEJMANAGIC
BOSNIA AND HERZEGOVINA

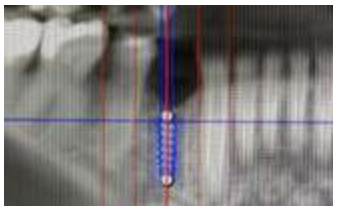
CASE DESCRIPTION

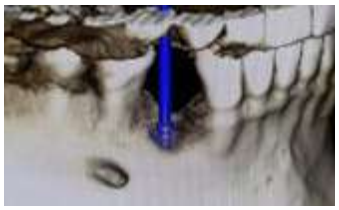
A 45-year-old partially edentulous patient goes to the dentist for a rehabilitation assessment. Physical and instrumental examination shows the absence of element 45 with vertical and horizontal bone resorption.

The surgical planning performed on Cone Beam CT shows that inserting a B&B Dental 3P implant in the ideal position causes part of the implant coils to remain exposed.

Implant surgery is performed according to the freehand protocol with simultaneous implant coating via a mix of heterologous bone and PRF (platelet rich fibrin).

Submerged healing will later allow the insertion of a screw-retained prosthetic crown.


IMPLANT INSERTION PLANNING


REGENERATIVE BONE PLANNING


IMPLANT INSERTION


PRF AND BONE REGENERATION MATERIALS


GBR


HEALED TISSUE AT 4 MONTHS


HEALED TISSUE AFTER THE HEALING SCREW


FINAL PROSTHESIS

DEFERRED LOADING IMPLANT INSTALLATION WITH SOCKET CONSERVATION VIA COLLAGEN

DR. FABIO MANUEL FILANNINO
ITALY

CASE DESCRIPTION

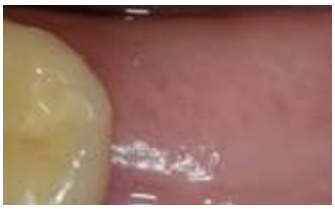
A 51-year-old woman went to her dentist for an evaluation of element 4.6. From the physical and instrumental examination, the tooth element was considered non-recoverable. We therefore proceeded with the planning of a double surgery: a first extractive and alveolar preservation surgery and a second implant placement surgery 4 months after the first surgery.

During the second surgery, a trapezoidal flap was created with preservation of the papilla and de-epithelialization of the crestal component.

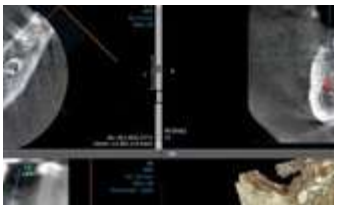
Once skeletalisation took place, the B&B Dental EV implant was inserted subcrestally freehand with burs and compactors.

The choice of subcrestal placement was justified by the small height of the mucosal tissues. A peek healing screw was screwed onto the head of the implant, suitably modified with flowable composite so that a correct emergence profile could be recreated and at the same time could support the vestibularly overturned flap according to the roll-flap technique.

Final suturing was performed with interrupted 5-0 vycril sutures.



INITIAL CLINICAL SITUATION

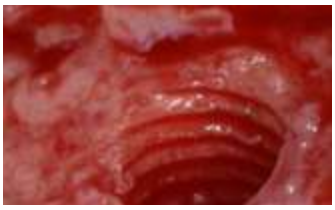


DESIGN PHASE

MUCOUS MEMBRANE DE-EPITHELIALIZATION

PAPILLA CONSERVATION FLAP

USE OF EXPANDERS



BONE TAPPING

IMPLANT INSERTION

GINGIVAL THICKNESS INSPECTION

PEEK SCREW MODIFICATION

MODIFIED PEEK SCREW PROFILE

PEEK SCREW IN PLACE

ROLL FLAP AND FINAL SUTURES

OSSEO-DENSIFICATION WITH GBR

DR. RAMZI KAZZAZI
IRAQ

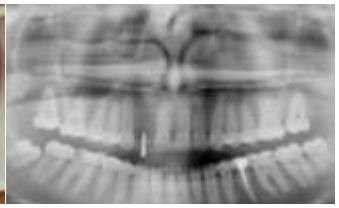
CASE DESCRIPTION

The young patient (19 years old) went to her dentist with a significant aesthetic request due to the loss of tooth 12. On physical and instrumental examination, severe horizontal bone resorption was evident, which did not allow for conventional rehabilitation.
Considering the patient's request and possible treatment plans, the dentist opted for the insertion of a B&B Dental 3P 3.5x14 mm implant, concomitant bone regeneration, a deferred prosthetic loading and temporary prosthesis with a Maryland bridge.
Surgery involved the preparation of a mucoperiosteal envelope flap from element 14 to element 21. It then involved implant insertion using a guide template for the first drill and regeneration of the exposed coils using biomaterial of heterologous origin mixed with autologous particulate bone and collagen membrane.
Suturing by first intention is done using horizontal mattress stitches and simple stitches.

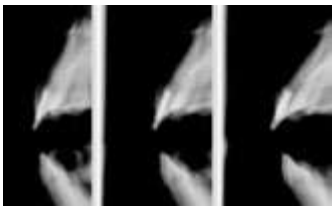
MODEL WITH MISSING ELEMENT 12

TEMPORARY MASK TO PRESERVE SPACE AND AESTHETICS

AESTHETIC AND NUMERICAL EVALUATION



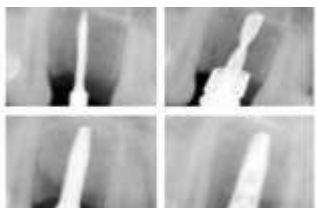
SURGICAL TEMPLATE IN POSITION - SHOWS THE POINT TO BE MILLED



TOMOGRAPHY

BONE DEPRESSION IN THE LABIAL AREA

TEMPLATE POSITIONING AND FIRST DRILLING PHASE



PERIAPICAL X-RAY TO ASSESS IMPLANT POSITION

IMPLANT INSERTED 3MM BELOW THE CEJ

FINAL IMPLANT PLACEMENT

MEMBRANE PLACEMENT AND RESORBABLE SUTURE

FINAL X-RAY INSPECTION FOR IMPLANT PLACEMENT

BILATERAL SPLIT CREST WITH BONE EXPANDERS AND PIEZO

DR. ALESSANDRO CECCHERINI
ITALY

INITIAL CLINICAL SITUATION

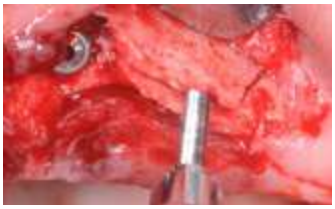
CASE DESCRIPTION

A 45-year-old woman went to the dentist with partial edentulism in the first and third sextant and required rehabilitation. The physical and instrumental examination showed a reduced thickness of the bone component and therefore implant rehabilitation combined with bone augmentation using a split crest technique was opted for.
The procedure involved the preparation of a mucoperiosteal flap, the insertion of two B&B Dental 3P post-extractive implants in position 13, 23 and the preparation of the distal recipient site by means of cortical cuts with piezo surgery and expansion with B&B Dental bone expanders.
After expansion, two B&B EV implants were inserted in position 15 and 25 as well as bone of heterologous origin and collagen membrane for protection.
Suturing by first intention concluded the surgery.

POST EXTRACTION-EV IMPLANT INSERTED- BUCCAL EXPOSURE

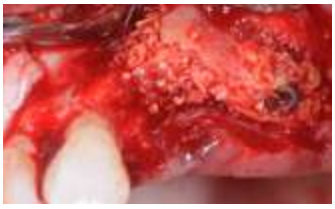
PIEZO & CRESTAL SPLITTING

PIEZO & CRESTAL SPLITTING



SITE PREPARATION WITH B&B DENTAL EXPANDERS

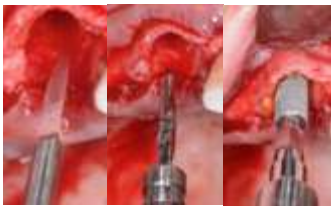
EV IMPLANT INSERTION



AUTOLOGOUS GBR

COLLAGEN MEMBRANE

TOOTH EXTRACTION ON THE OPPOSITE SIDE



SITE PREPARATION AND IMMEDIATE IMPLANT PLACEMENT

PIEZO SURGERY

CRESTAL SPLITTING

SITE PREPARATION WITH EXPANDERS

SLIM IMPLANT INSERTION

AUTOLOGOUS GBR AND COLLAGEN MEMBRANE

1.5 AND 1.6 IMPLANTS WITH MINI MAXILLARY SINUS LIFT

DR. MATTIA D'AMBROSIO
ITALY

CASE DESCRIPTION

Male, 49 years old, unremarkable medical history.

The patient came to the first consult, he was referred by a colleague for prosthetic implant rehabilitation. The clinical examination showed a dental gap in areas 1.6 and 1.5 with an adequate presence of keratinised gingival tissue.

The instrumental examination showed a slight expansion of the maxillary sinus with reduction of the vertical bone amount.

In view of the various investigations, an implant insertion and simultaneous bone augmentation in zone 1.6 using the mini-augmentation technique of the maxillary sinus associated with particulate heterologous bone of bovine origin was foreseen.

Implant surgery according to the B&B Dental protocol for D3/D4 bone involved the use of the manual bone compactors included in the surgical kit. In the phase preceding the insertion of the two 3P line implants, a greenstick fracture of the sinus floor was performed using specific osteotomes.

Approximately 3 months after surgery, two single crowns made of monolithic zirconia screwed with a T-base abutment were fitted.

INTRA-ORAL OCCLUSAL PHOTO UPPER ARCH

INTRAORAL OCCLUSAL PHOTO, DETAILS ZONE 1.5 - 1.6

LATERAL INTRAORAL PHOTO, DETAILS ZONE 1.5 - 1.6

SOFT TISSUE INCISION

SOFT TISSUE DETACHMENT

SITE PREPARATION 1.5, PILOT BUR

SITE PREPARATION 1.5, PIN FOR CORRECT PARALLELISM EVALUATION

SITE PREPARATION 1.5, BONE COMPACTOR

OCCLUSAL VIEW WITH BONE COMPACTOR

LATERAL VIEW WITH BONE COMPACTOR

LATERAL VIEW WITH PARALLELISM INSPECTION PIN BETWEEN IMPLANTS

PARTICULATE BONE OF BOVINE ORIGIN

PREPARED IMPLANT SITES, OCCLUSAL VIEW

IMPLANTS INSERTED, OCCLUSAL VIEW

POST-SURGICAL SUTURING, LATERAL VIEW

POST-SURGICAL OPT

HEALING AT 15 DAYS WITH SUTURES

HEALING AT 15 DAYS POST SUTURE REMOVAL

INTRACLINICAL DETAILS WITH HEALING SCREWS 3 MONTHS AFTER SURGERY

INTRACLINICAL SOFT TISSUE DETAILS WITHOUT HEALING SCREWS AT 3 MONTHS

CLINICAL DETAILS OF PICK-UP IMPRESSION TRANSFERS

CROWN FITTING TEST OF SCREW-RETAINED ZIRCONIA CROWNS

ZIRCONIA CROWN FITTING, OCCLUSAL VIEW

ZIRCONIA CROWN FITTING, LATERAL VIEW

PERIAPICAL X-RAY POST-FITTING OF PROSTHETIC CROWNS

OPT POST-FITTING OF PROSTHETIC CROWNS

OSSEO-DENSIFICATION WITH GBR

DR. ABDUSALAM E. ALRMALI
LIBYA

CASE DESCRIPTION

A 43-year-old woman went to the dentist in order to rehabilitate her edentulous area 46.
Physical and radiographic examination showed a horizontal type gap in the bony-mucosal tissue. An implant-prosthetic rehabilitation with vestibular bone augmentation was therefore planned. Surgery involved a mucoperiosteal envelope flap, the insertion of a 4.5x12 mm B&B Dental 3P implant according to the classic freehand protocol and 1 mm subcrestal placement.
At the same time, the vestibular bone component was regenerated with particulate heterologous bone and titanium pin fixation of a collagen membrane to help stabilise the graft and exclude epithelial cells from it.
After careful release of the flaps with periosteal incisions, the surgical wound was sutured by first intention using a double suture: deep horizontal mattress for flap eversion and force reduction associated with more superficial simple stitches.

INITIAL CLINICAL SITUATION

OPENING AND DETACHMENT OF THE GINGIVA

OSTEOTOMY READY

POSITION INDICATOR

IMPLANT AND HEALING SCREW

POSITIONING OF COLLAGEN MEMBRANE

GBR POSITIONING

X-RAY INSPECTION

SUTURES

VERTICAL BONE VOLUME REHABILITATION FOR IMPLANT INSERTION

DR. IOANA DATCU
ITALY

CASE DESCRIPTION

A 38-year-old woman required a dental consultation for the rehabilitation of partial edentulism via a fixed solution. The physical and instrumental examination showed edentulism in the 4th and 6th sextant with severe three-dimensional bone resorption that did not favour the correct three-dimensional insertion of implants.

A double surgery was therefore planned: the first one being a bone regeneration and the second one a B&B Dental 3P implant placement.

The first surgery was performed by setting up a trapezoidal flap appropriately released from the periosteum to facilitate subsequent passive closure of the surgical site.

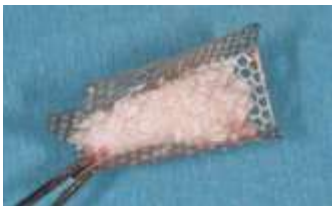
Regeneration was performed using a biomaterial of heterologous origin fixed with T-Barrier B&B Dental in titanium, 4 pins and T-Barrier B&B collagen membrane for coverage.

The double horizontal mattress sutures to reduce tension and the interrupted stitch sutures to close by first intention allowed for closure of the surgical site.

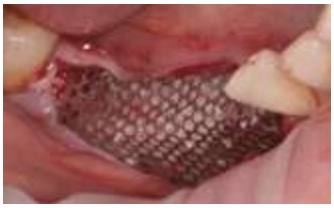
PRE-OP X-RAY EXAMINATION

INITIAL CLINICAL SITUATION

OPENING OF THE GINGIVA



ADAPTED TITANIUM MEMBRANE WITH REGENERATION MATERIAL

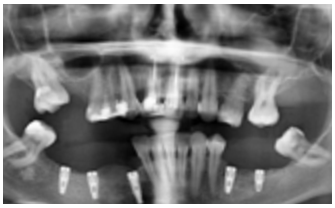


TITANIUM MEMBRANE AND REGENERATION MATERIAL IN PLACE

POSITIONING OF COLLAGEN MEMBRANE

SITUATION 4 MONTHS AFTER SURGERY

IMPLANT PLACEMENT



POST-OP SITUATION

BONE REGENERATION AND PRF IN PARTIALLY EXPOSED IMPLANT PLACEMENT

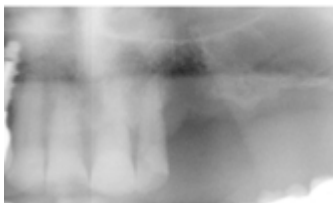
DR. CLAUDIO BANZI
ITALY

CASE DESCRIPTION

A 58-year-old partially edentulous man required a fixed rehabilitation in the third sextant. The physical and instrumental examination specifically showed that the maxillary sinus had undergone a large expansion over the years.

This anatomical variable did not allow for the insertion of an implant of adequate length and therefore only through intrasinusal bone augmentation could the limitation be overcome.

The surgery was carried out using the method of maxillary sinus expansion with B&B Dental osteotomes, heterologous bone and simultaneous insertion of a B&B Dental 3P implant fixed buccally with a titanium grid to avoid dislocation of the implant in the sinus.



INITIAL X-RAY - MAXILLARY SINUS IS NOT HIGH ENOUGH

INITIAL CLINICAL SITUATION

OSTEOTOMY PREPARATION WITH THE COMPACTOR

GRADUAL INCREASE IN DIAMETER AND HEIGHT TO RAISE THE MAXILLARY SINUS MEMBRANE

INJECTION OF BONE REGENERATION MATERIAL

IMPLANT INSERTION

TITANIUM MEMBRANE FOR IMPLANT SAFETY

MEMBRANE FIXED ONTO THE IMPLANT

CLINICAL SITUATION ONE WEEK AFTER THE PROCEDURE

X-RAY FOR FINAL INSPECTION

CREST SPLIT WITH 3P IMPLANTS


PROF. DR. NAIDA SULEJMANAGIC HADZIABIC - DR. NEDIM SULEJMANAGIC
BOSNIA AND HERZEGOVINA

CASE DESCRIPTION

A 45-year-old patient without any particular pathology asks his dentist for an implant-prosthetic rehabilitation in the fourth quadrant, which has been edentulous for years. First and second level physical and instrumental examination shows severe horizontal crestal bone resorption, which is about 2 mm thick in the vestibulo-lingual direction.

In accordance with the patient's requests, 'split-crest' ridge expansion surgery and simultaneous insertion of two B&B Dental 3P 3.5x10 mm implants is performed.

A trapezoid mucoperiosteal flap is incised and then, using piezo surgery, osteotomy lines are drawn, which are green stick fractured using osteotomes and expanders.

After expansion, the two implants are inserted and the remaining defect are filled with B&B Dental bone regeneration material mixed with PRF and covered with B&B Dental T-Barrier collagen membrane.

The final suture following periosteal release involves the use of a double line of mattress sutures and interrupted stitches.


CRESTAL SPLITTING


IMPLANTS IN PLACE WITH TITANIUM HEALING SCREWS


GBR PREPARATION


GBR PREPARATION BEFORE BONE MATERIAL


BONE REGENERATION MATERIAL


PREPARATION OF BONE MATERIAL


PRF IN PLACE


HYDRATION OF THE COLLAGEN MEMBRANE


COLLAGEN MEMBRANE IN PLACE


SUTURES

USE OF TITANIUM T-BARRIER MEMBRANE AND REGENERATIVE MATERIAL IN THE FRONTAL AREA

DR. UJAM LUTFI
SWEDEN

CASE DESCRIPTION

A 40-year-old man with a history of hypertension went to the dentist with a significant aesthetic request due to the loss of element 11 via trauma.
The physical and instrumental examination showed a strongly horizontally resorbed surgical area, but implant rehabilitation with concomitant bone regeneration was nevertheless opted for. The surgery proceeded with the establishment of a trapezoidal mucoperiosteal flap from element 13 to element 22.
A partially buccally exposed B&B Dental 3P implant was inserted.
The gap was wedged with biomaterial of heterologous origin stabilised with a B&B Dental titanium T-Barrier and a collagen T-Barrier.
Once the flaps were released, a tension-free first intention suture was perform

At 4 months, a second surgery was performed to remove the grid and insert t

INITIAL SITUATION

IMPLANT INSERTED WITH UNCOVERED VESTIBULAR SIDE

BONE REGENERATION MATERIAL IN PLACE

TITANIUM T-BARRIER MEMBRANE FIXED ON THE IMPLANT

COLLAGEN T-BARRIER MEMBRANES

GUM SUTURING

HEALING AFTER 4 MONTHS

SECOND SURGICAL STEP - REMOVAL OF TITANIUM MEMBRANE

PEEK HEALING SCREW

FOLLOW-UP AT 3 YEARS

AESTHETIC AND FUNCTIONAL REHABILITATION IN THE FRONTAL POST-EXTRACTION AREA

DR. ALESSANDRO CECCHERINI
ITALY

CASE DESCRIPTION

A 45-year-old woman with a compromised element 21 due to a fracture went to her dentist. Physical and instrumental examination confirmed the impairment of the tooth element. In agreement with the patient, an extraction and immediate insertion of a B&B Dental EV implant was carried out, which is more suitable in post-extraction cases.

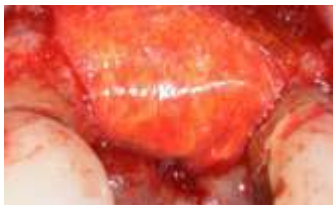
On the day of surgery, the vestibular flap was also peeled back to facilitate regeneration of the site with heterologous bone and membrane and to facilitate first intention suturing of the site.

Four months later, the implant was uncovered and a peek healing screw was screwed onto the head of the implant.

TOOTH EXTRACTION

IMPLANT PLACEMENT IN BUCCAL BONE DEFICIENCY

BONE REGENERATION MATERIAL



COLLAGEN T-BARRIER MEMBRANES

3 MONTHS AFTER THE OPERATION

SOFT TISSUE HEALING - MARYLAND BRIDGE

SOFT AND HARD TISSUE MANAGEMENT IN A LATE IMPLANT IN AN AESTHETIC AREA

DR. IOANA DATCU
ITALY

CASE DESCRIPTION

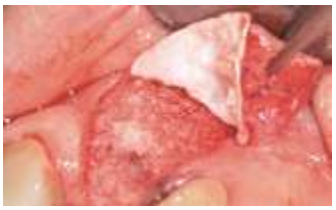
A 50-year-old woman went to the dentist requesting aesthetic rehabilitation in area 21, the site of a previous extraction.
First and second line physical and instrumental examination showed a horizontal defect that requires bone augmentation.
The therapeutic objective involved a first phase of implant placement and a second phase of soft tissue management with grafts and temporary prosthesis.
The first operation involved the preparation of a trapezoidal mucoperiosteal flap with preservation of the papillae, free-hand insertion of a B&B Dental EV implant and the simultaneous regeneration with bone of heterologous origin stabilised with a collagen membrane, as well as first-intention sutures with fully passivated flaps.
After 6 months of healing, the second surgical phase of soft tissue augmentation with connective tissue graft taken from the palate and increase of the keratinised component and gingival thickness was performed.
At the same time, a provisional prosthesis was made, which will be modified over the following three months with resin or flow composite to give the papillae the most anatomically correct conformation through a series of gradual compressions.
The final cemented prosthesis will be made of zirconia.

INITIAL SITUATION

FULL-THICKNESS FLAP WITH LATERAL RELEASE INCISION

EV IMPLANT INSERTION

IMPLANT INSERTION



COLLAGEN MEMBRANE IN PLACE

ZIRCONIUM ABUTMENT 9 MONTHS AFTER SURGERY

FINAL SITUATION

USE OF GBR WITH COLLAGEN MEMBRANE ON VERTICAL PERIODONTAL DEFECT

DR. ANGELO BANZI
ITALY

CASE DESCRIPTION

A 53-year-old male, non-smoker, being treated for periodontal disease, undergoes a recall visit after an initial phase of non-surgical therapy.

On examination, an intrabony defect remained distally to tooth 44 and therefore given the right conditions (FMPS and FMBS <10) regenerative periodontal surgery was planned.

A mucoperiosteal flap was set up with preservation of the papilla, which allowed the defect to be revealed. This was then cleaned while the root was treated with curette and EDTA.

After the first phase, the defect was filled with bone of heterologous origin and a collagen membrane T-Barrier B&B Dental was used to cover it.

A mattress suture was performed for first intention closure of the defect.

ZIRCONIUM ABUTMENT 9 MONTHS AFTER SURGERY

TRIANGULAR OPENING ON GINGIVA AND CURETTAGE

ULTRASOUND AND MANUAL CLEANING

ROOT DECONTAMINATION

PLACEMENT OF BONE REGENERATION MATERIAL

REGENERATION MATERIAL IN PLACE

MODELLING AND INSERTION OF THE COLLAGEN MEMBRANE

COLLAGEN MEMBRANE IN PLACE

SUTURES - POST-OP SITUATION

10 DAYS AFTER THE OPERATION

FOLLOW UP 1 MONTH AFTER THE OPERATION

IMPLANT IN AREA 46 AND SOFT TISSUE MANAGEMENT

DR. MATTIA D'AMBROSIO
ITALY

CASE DESCRIPTION

Male, 39 years old, unremarkable medical history.
The patient went to the referring dentist with a request to rehabilitate the buccal cavity.
Intraoral physical examination revealed partial edentulism in area 4.6.

Edentulism had been present for several years and was therefore associated with a minimal horizontal defect, mainly of soft tissue.

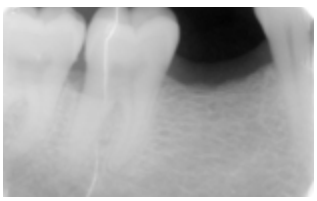
We planned to insert a B&B Dental 3P implant according to the free-hand surgical protocol for D1 bone with subcrestal placement and simultaneous insertion of the healing screw.

Adequate crestal soft tissue height will promote bone maintenance; the horizontal defect was partially filled by intra-surgical thickening with collagen of equine origin.

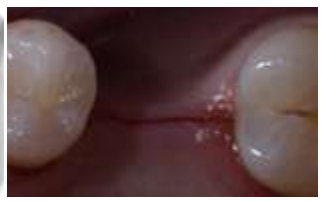
At approximately 3 months of healing, the case was completed with an analogue pick-up impression and the fabrication of a screw-retained monolithic zirconia crown.

OCCLUSAL INTRAORAL PHOTO

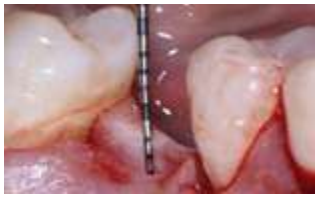
. LATERAL INTRAORAL PHOTO



PRE-SURGICAL PERIAPICAL X-RAY



SOFT TISSUE INCISION



SOFT TISSUE HEIGHT ASSESSMENT WITH PERIODONTAL PROBE

PREPARATION OF THE SITE WITH A LANCE DRILL

SITE PREPARATION WITH PILOT DRILL AND DEPTH STOPPER

PIN PARALLELISM INSPECTION

SITE PREPARATION WITH 3 MM BUR AND DEPTH STOPPER

SITE PREPARATION WITH 3.5 MM BUR AND DEPTH STOPPER

SITE PREPARATION WITH 4 MM BUR AND DEPTH STOPPER

SITE PREPARATION WITH COUNTERSINK DRILL

OCCLUSAL VIEW OF THE PREPARED SITE

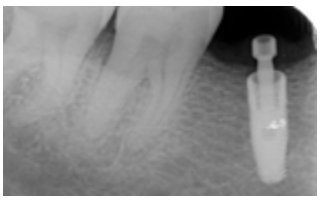
OCCLUSAL VIEW WITH IMPLANT INSERTED

LATERAL VIEW WITH IMPLANT INSERTED

EQUINE COLLAGEN MATRIX SUTURED TO THE VESTIBULAR FLAP

OCCLUSAL VIEW OF THE FINAL SUTURES AND HEALING SCREW

LATERAL VIEW OF THE FINAL SUTURE



POST-OP PERIAPICAL X-RAY

OCCLUSAL VIEW OF THE IMPLANT WITH HEALING SCREW 3 MONTHS AFTER SURGERY

OCCLUSAL VIEW OF THE IMPLANT WITHOUT HEALING SCREW 3 MONTHS AFTER SURGERY

CLINICAL DETAILS OF THE PICK-UP IMPRESSION TRANSFER

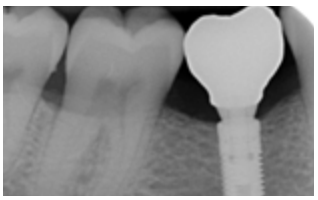
LATERAL VIEW OF ZIRCONIA CROWN ON MODEL

OCCLUSAL VIEW OF THE ZIRCONIA CROWN ON MODEL

EXTRA-ORAL DETAILS OF THE SCREW-RETAINED CROWN WITH T-BASE

OCCLUSAL INTRAORAL VIEW OF THE CROWN

LATERAL INTRAORAL VIEW OF THE CROWN



PERIAPICAL RX AT CROWN FITTING

ORAL CAVITY REHABILITATION USING CUSTOMISED MESH GRIDS

DR. GIUSEPPE MUSIELLO
ITALY

CASE DESCRIPTION

Male, 42 years old, unremarkable medical history, non-smoker.
The highly motivated patient went to his dentist with the request of restoring the integrity of his oral cavity.
The physical clinical and instrumental examination established the need for a multidisciplinary treatment plan. Specifically in this case, in the lower arch there was an absence of the dental elements of the fifth sextant (3.3 to 4.4) with severe bone atrophy for which it was difficult to insert implants in a conventional manner: a preliminary bone regeneration surgery (GBR) was planned using appropriately customised titanium grids (B&B Dental).
Procedure steps:

1. Venous blood collection for handling and processing of PRF membranes
2. Trapezoidal mucoperiosteal flap with involvement of one/two teeth on each side and isolation of the two mental nerves
3. Autologous bone harvesting from the anatomical component of the chin via a safe-scraper
4. Mixing autologous bone with heterologous bone of bovine origin 50:50
5. Testing and stabilisation of the custom-made B&B Dental titanium grid which was filled with the bone mix
6. Release of the flaps (vestibular and lingual) using a scalpel blade to make the flaps completely passive
7. Placement of collagen membranes (B&B Dental) and PRF above the grid
8. Closure of the surgical flaps by first intention with a double line of sutures: horizontal mattress sutures to promote healing and reduce tension above the regenerated area, a second row of interrupted sutures for first intention closure.

BLOOD SAMPLING FOR PRF MANIPULATION

LOCAL ANAESTHESIA

TRAPEZOIDAL FLAP OPENING

DETACHMENT

PRELIEVO DI OSSO AUTOLOGO MEDIANTE SAFE-SCRAPER

PREPARAZIONE DEL SITO AI MATERIALI DI RIGENERAZIONE

PREPARAZIONE DEI MATERIALI DI RIGENERAZIONE

POSIZIONAMENTO DEL MATERIALE DI RIGENERAZIONE OSSEA ALL'INTERNO DELLA GRGILIA MESH

POSIZIONAMENTO DELLA GRIGLIA MESH CUSTOMIZZATA

AVVITAMENTO DELLA GRIGLIA MESH NELL'OSSO

POSIZIONAMENTO MEMBRANE IN COLLAGENE

POSIZIONAMENTO PRF

SUTURA

SITUAZIONE FINALE

PROVA DI INSERIMENTO PROVVISORIO

PROSTHESES

SINGLE REHABILITATION

DR. HALA AL YAMANI
JORDAN

CASE DESCRIPTION

A 33-year-old woman went to her dentist for the rehabilitation of a single tooth. On physical and instrumental examination, element 46 was revealed to be severely compromised. Therefore, the extraction and insertion of a B&B Dental EV implant to carry out a prosthetic-functional rehabilitation was envisaged.

The procedure involved atraumatic tooth extraction and simultaneous implant placement.

The insertion torque of >25 Ncm allowed the connection of the peek healing screw suitably modified with flowable composite in order to handle soft tissue and emergence profiles in a prudent manner.

Four months later, after osseointegration took place, a precision impression was made using the pick-up technique with a modified transfer (to match the emergence profiles obtained).

The final prosthetic crown was made of metal ceramic and screwed directly onto the implant.

INITIAL CLINICAL SITUATION

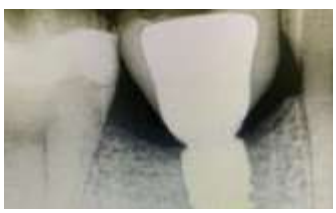
HEALING SCREW IN POSITION

CLINICAL VIEW AFTER HEALING SCREW

TRANSFER IN POSITION

CROWN PLACEMENT

CROWN IN POSITION



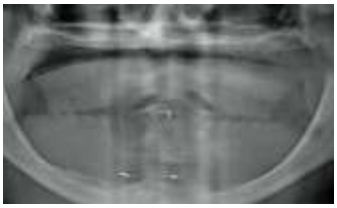
X-RAY FOR IMPLANT POSITION INSPECTION

STABILISATION OF MOBILE DENTURES WITH OT EQUATOR ATTACHMENTS

DR. IOANA DATCU
ITALY

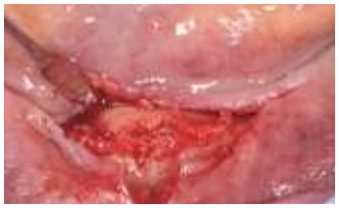
CASE DESCRIPTION

A 76-year-old man goes to the dentist for a purely functional problem. The patient reports that he has had two total mobile prostheses for many years and that he has noticed for some time that they are not stable. The patient, therefore, requires a treatment designed to increase comfort without fear of dislocation of the prosthesis, possibly a semi-fixed solution but at a low cost.
On first level clinical and instrumental examination, there is evidence of severely atrophic alveolar processes and reduction of the labial fornix space.
Given the severe atrophy, the treatment plan proposed to the patient involves a new upper mobile prosthesis and a stabilised lower mobile prosthesis with 2 B&B Dental 3P implants in the intraforaminal area connected to OT Equator attachments.
Freehand surgery involves the creation of a mucoperiosteal flap involving the intraforaminal area with a crestal and midline unloading incision.
The two implants are inserted freehand with the use of depth stoppers and parallelism pins. After suturing by first intention, the implants are left to heal submerged for three months.
Once osseointegration has taken place, after about three months, the implants are connected to the OT Equator attachments and the new prosthesis is stabilised on them.



PRE-OP OPT

PRE-OP INTRAORAL PHOTOS



DETACHED MUCO-PERIOSTEAL FLAP (MEDIAN OUTLET)

SITE PREPARATION WITH 2.1 MM PILOT DRILL AND STOPPER

PIN PARALLELISM INSPECTION

SITE PREPARATION WITH 3 MM BUR AND STOPPER

IMPLANT SITE PREPARATION WITH 3.5 MM BUR AND STOPPER

PRE-OP PHOTOS

CROWN PORTION PREPARATION WITH COUNTERSINK DRILL

IMPLANT INSERTION 3P

IMPLANT INSERTION 3P

UNCOVERING OF IMPLANTS (AT 3 MONTHS) AND CONNECTING THEM TO OT EQUATOR ATTACHMENTS

UNCOVERING OF IMPLANTS (AT 3 MONTHS) AND CONNECTING THEM TO OT EQUATOR ATTACHMENTS

OT EQUATOR IN POSITION

PREPARATION OF THE MOBILE PROSTHESIS FOR RECEIVING CONNECTION COPINGS

CONNECTION COPINGS PLACED ON OT EQUATOR ATTACHMENTS

CONNECTION COPINGS FIXED WITH RESIN ON THE LOWER MOBILE PROSTHESIS

CLINICAL PHOTOS OF FINAL PROSTHETIC PRODUCTS

POST-OP X-RAY

COMPLEX IMPLANT INSERTION IN MAXILLA WITH MUA-SUPPORTED PROSTHESIS

DR. SHU LING
CHINA

CASE DESCRIPTION

A 59-year-old man went to his dentist for widespread dental pain and mobility.
Physical and instrumental examination revealed a periodontally compromised dentition.
The teeth of the upper arch and those of the lower arch for elements of the 4th and 5th sextant were deemed to be non-recoverable.

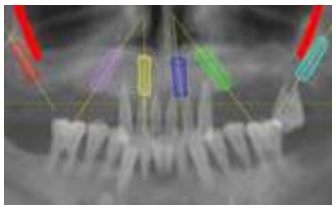
In agreement with the patient, a fully protocol-guided B&B Dental surgery was planned to insert 6 implants in the upper arch and 3 below to support a metal wire-reinforced immediate loading prosthesis.

INITIAL SITUATION

INITIAL SITUATION

INITIAL SITUATION

X-RAY FOR EVALUATION



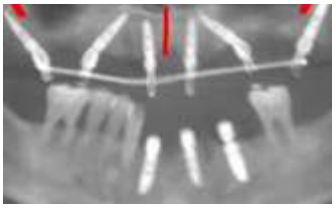
SURGERY PLANNING

IMPLANTS INSERTED WITH MUA - UPPER ARCH

TEMPORARY UPPER PROSTHESIS

TEMPORARY PLACEMENT

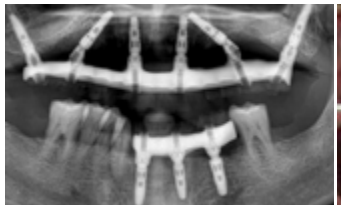
BITE INSPECTION



TEMPORARY PROSTHESIS X-RAY

IMPLANTS INSERTED WITH MUA- LOWER ARCH

UPPER AND LOWER GINGIVAL RESTORATION



FINAL X-RAY INSPECTION

COMPARISON BETWEEN BEFORE AND AFTER

SINGLE-ELEMENT REHABILITATION WITH IMMEDIATE LOADING

DR. MATTEO BALDINI
ITALY

CASE DESCRIPTION

Female, 45 years old, unremarkable medical history.

On intraoral and instrumental first line physical examination, element 2.2 is observed with destructive caries and is a site of repeated abscesses.

The extraction of the tooth element and simultaneous insertion of a B&B Dental EV implant with immediate loading on a straight abutment is planned via the conometric technique.

TOOTH POST EXTRACTION

INSERTION OF ACCESSORIES

X-RAY INSPECTION

CROWN

CROWN IN POSITION


PTERYGO

THERAPEUTIC TREATMENT FOR MAXILLARY SINUS ATROPHY: PTERYGOID IMPLANTS

DR. GUIDO RAVECCA
ITALY

CASE DESCRIPTION

A 56-year-old man with a history of diabetes and bruxism presented to the dentist for pain and inflammation in the first quadrant.
On physical and instrumental examination, element 17 had grade 3 mobility and elements 15 and 14, which had been endodontically treated previously, had a periapical granuloma. The expansion of the maxillary sinus was also observed to be severely opaque due to previous sinusitis.
Given all this clinical information, the decision was made to extract the three teeth, insert two post-extraction B&B Dental EV implants in position 14 and 15 and a distal pterygoid implant.
The procedure started with a low adrenaline anaesthesia to avoid excessive vasoconstriction in the diabetic patient. The extraction of the dental elements preceded the insertion of 2 B&B Dental EV implants with an insertion torque >30 Ncm favourable for the simultaneous provisional prosthetic loading on MUA. The gap between implants and vestibular bone wall was filled with B&B Dental biomaterial.
Simultaneously, a distal pterygoid implant was inserted to facilitate complete rehabilitation and maxillary sinus avoidance.

INITIAL INSPECTION WITH CBCT

EVIDENT DEHISCENCE IN THE TUBER AREA AND COMPROMISED ELEMENT

TOOTH EXTRACTION WITH SOFT TISSUE DETACHMENT

IMPLANT SITE PREPARATION WITH BUR AND STOPPER

PTERYGO IMPLANT INSERTION

PTERYGO IMPLANT INSERTED

EV IMPLANT INSERTION

GBR AND IMPLANTS IN PLACE

TITANIUM ABUTMENTS AND WELDING BAR

FINAL INSPECTION WITH CBCT

BILATERAL PTERYGOID IMPLANT PLACEMENT

DR. MARCO ROY
POLAND

CASE DESCRIPTION

A 48-year-old man goes to his dentist due to diatoric tooth elements of the maxillary arch that are completely compromised from a periodontal and endodontic point of view. Physical and instrumental examination confirms the difficulty in maintaining some of these elements and also shows a severe expansion of the maxillary sinuses.
In accordance with the patient's requests for minimally invasive surgery with a reduction in operating time, a treatment plan is chosen that involves the extraction of elements 16-14-26-27, the insertion of conventional B&B Dental implants in positions 14-15-25 and two pterygoid implants in the most distal areas.
After an initial extraction phase of the elements considered as non-recoverable, a second surgery is performed at a distance of 3 months to insert the 5 implants according to B&B Dental's freehand protocol. The pterygoid implant with the right inclination allowes for stability in the retro-tuberal area and a better primary stability.

X-RAY INITIAL SITUATION

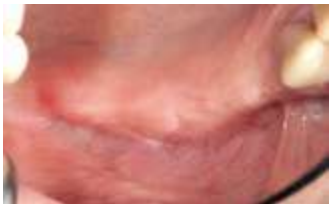
POST-EXTRACTION SITE

OSTEOTOMY PREPARATION

PTERYGO IMPLANT INSERTED

SECOND IMPLANT PLACEMENT

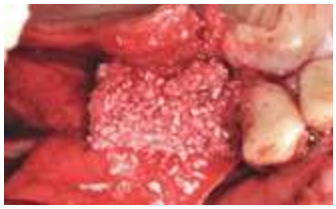
SUTURES AND IMPLANT HEALING SCREW



OPPOSITE SADDLE

OPENING OF THE GINGIVA

PLACEMENT OF THREE IMPLANTS: ONE PTERYGO AND TWO 3P



APPLICATION OF BONE REGENERATION MATERIAL AND COLLAGEN MEMBRANE

COLLAGEN T-BARRIER MEMBRANES

SUTURES AND HEALING SCREW

POST-OP X-RAY

IMPLANTS

IUXTA

(SUBPERIOSTEAL)

CUSTOMISED BILATERAL SUBPERIOSTEAL IMPLANTS ON ATROPHIC MANDIBLE

DR. ALESSANDRO CECCHERINI
ITALY

CASE DESCRIPTION

A 51-year-old patient went to the surgeon because she has severely atrophic edentulous posterior mandibular saddles. The patient reports difficulty in maintaining the mobile skeleton-type prosthesis.
Given the patient's requests, a double subperiosteal grid was designed in a fully digital manner, based on Cone Beam CT.
The procedure avoided more invasive bone regeneration surgery and allowed for immediate prosthesis production.

After the two trapezoidal flaps were set up, a template was first used to make the sockets for the subperiosteal grid, which was then appropriately fixed with osteosynthesis screws.

Any remaining gaps between bone and grid were filled in with bone of heterologous origin and the sutures covered the surgical area.
The grids themselves had integrated abutments to fix the subsequent prosthesis onto them.

GUM DETACHMENT

PLASTIC TEMPLATE FOR OSTEOTOMIES

PREPARATION OF THE IMPLANT SITE

PLACEMENT OF THE FIRST SUBPERIOSTEAL IMPLANT WITH SCREWS

BONE REGENERATION MATERIAL

SECOND SUBPERIOSTEAL IMPLANT

FINAL RESULT

PARTIAL EDENTULISM TREATED WITH IUXTA - SUBPERIOSTEAL IMPLANTS

DR. LUIGI ANGELO VAIRA
ITALY

CASE DESCRIPTION

Female, 62 years old, history of hyperthyroidism undergoing treatment.

The partially edentulous patient went to her referring dentist with the need of rehabilitating the third quadrant with a fixed solution as quickly as possible.

First and second line intraoral and instrumental physical examination showed partial edentulism distally to element 3.3 in the presence of a severe vertical and horizontal bone deficit.

In view of the patient's examinations and requests and as conventional implantology could not be performed, an iuxta-osseous implant procedure was arranged.

A custom-made grid was designed based on the DICOM files of the CT scan including two MUA abutments. An immediate prosthetic loading was scheduled on the day of implant fixation.

INITIAL SITUATION

3D MODEL

OSTEOTOMY PLANNING

IUXTA IMPLANT DESIGN

IUXTA IMPLANT IN POSITION

POST-OP SITUATION

MANDIBULAR EDENTULOUS SADDLE REHABILITATION WITH IUXTA-SUBPERIOSTEAL IMPLANTS

DR. CLAUDIO BANZI
ITALY

CASE DESCRIPTION

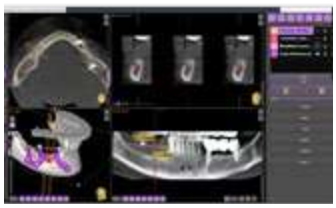
Female, 72 years old, unremarkable medical history.

At a first consult with her dentist, the patient reports the need to rehabilitate an edentulous mandibular saddle.

The specific clinical and radiographic examination reveals the absence of distal elements at element 4.3 with a strongly atrophic residual bone component that does not favour the insertion of conventional bone implants.

In view of the patient's request and clinical condition, a customised iuxtaosseous implant placement procedure is planned on the DICOM file of the Cone Beam CT scan supporting a 3-unit bridge with immediate loading by means of two pillars.

Surgically, a mucoperiosteal flap is performed and the implant is fixed with osteosynthesis screws. After suturing, a temporary resin bridge fixed on stabilising turrets is fitted.



SURGERY PLANNING

LOCAL ANAESTHESIA

FLAP OPENING

DETACHMENT

INSERTION OF OSTEOTOMY TEMPLATE

OSTEOTOMIES

IUXTA IMPLANT IN POSITION

FIXING THE IUXTA IMPLANT TO THE BONE

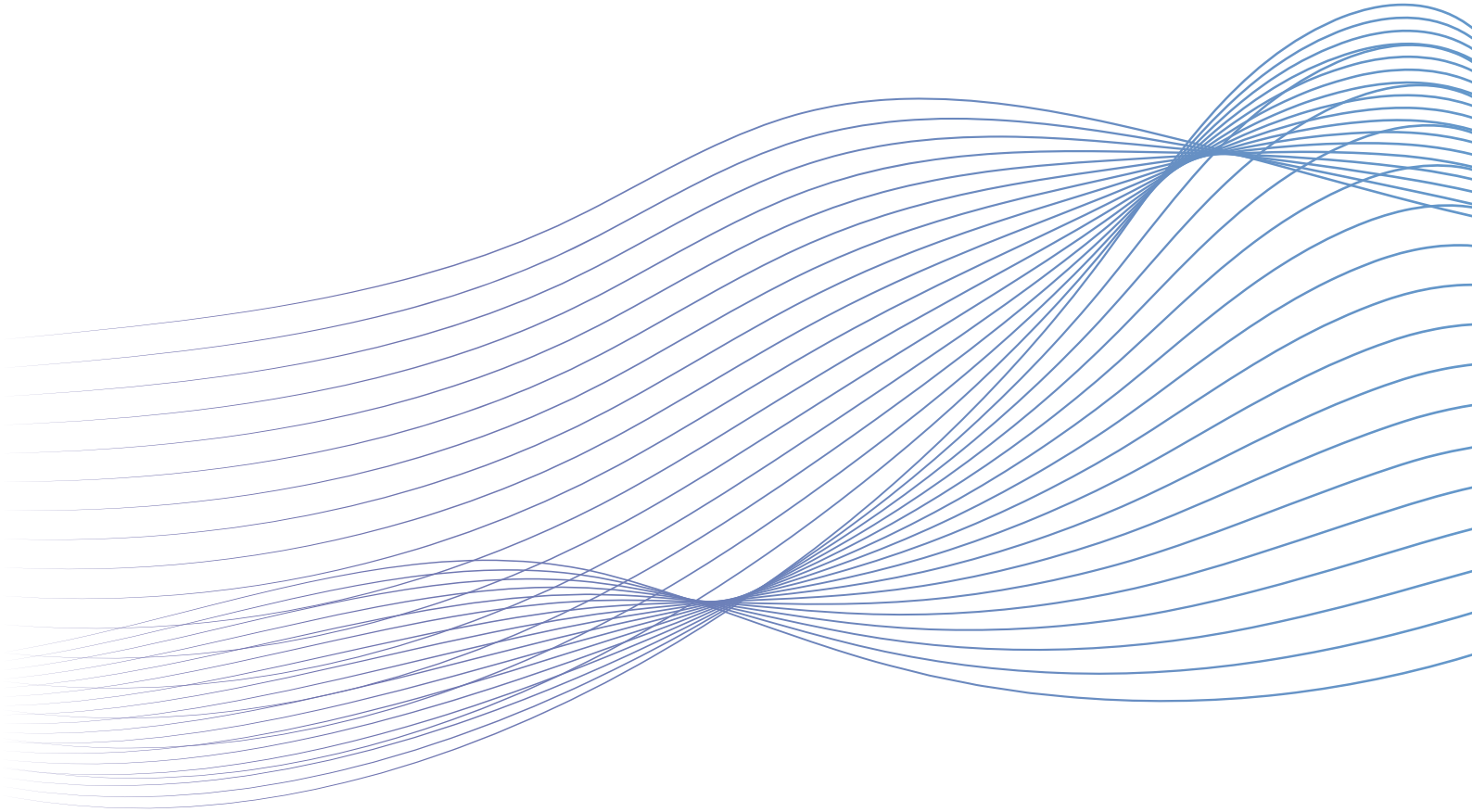
MUA-IUXTA IMPLANT INSERTION

SUTURES

SITUATION AFTER COMPLETE TISSUE HEALING

PROSTHESIS TURRETS IN POSITION

FINAL RESULT



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ED. 00 REV.00 - 13/09/2023