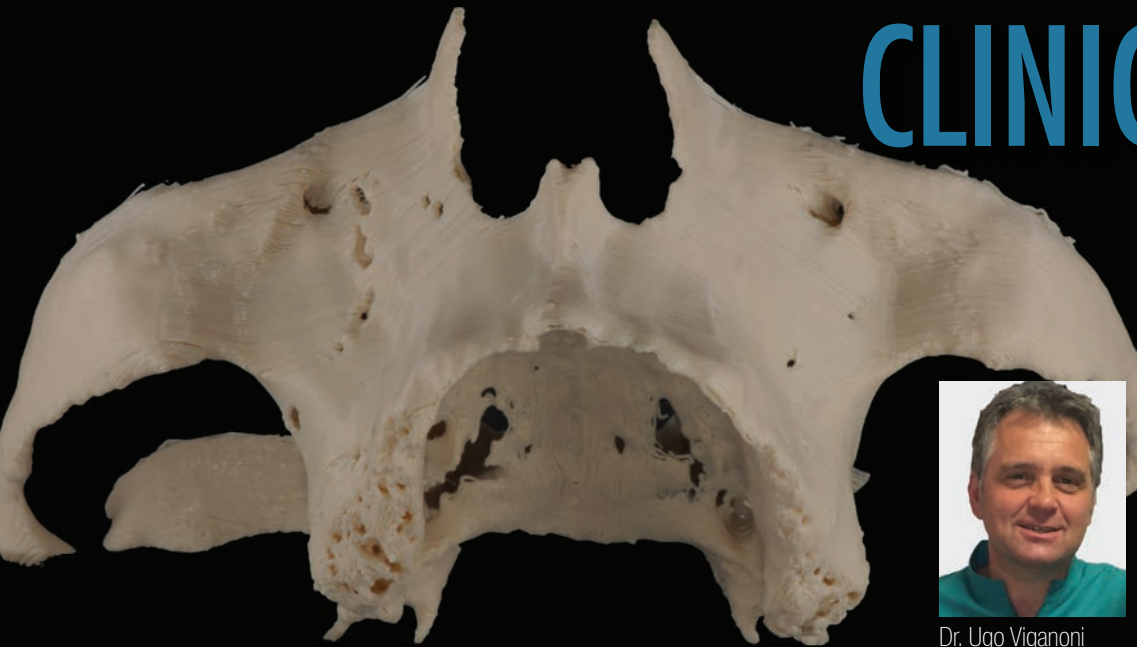


CLINICAL CASE REPORT:



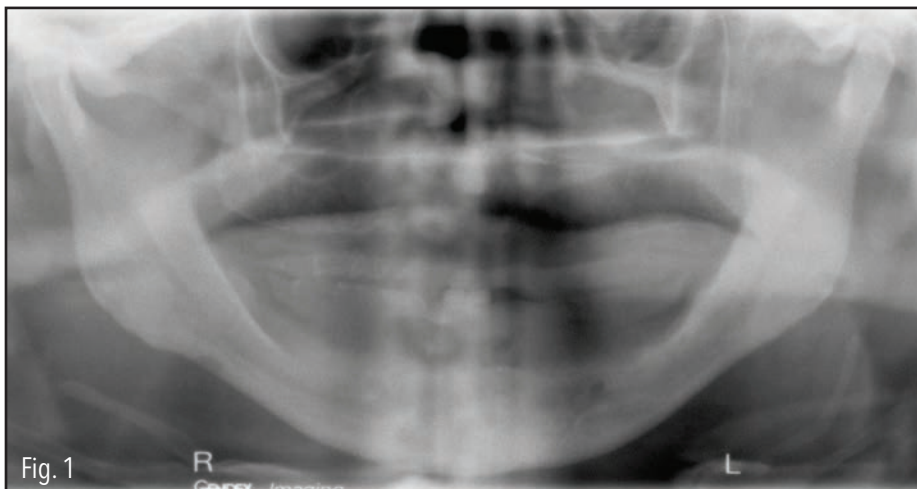
Dr. Ugo Viganoni



Gabriele Poma



Giorgio Poma



An edentulous 67-year-old male, had a complete removable restoration on the upper maxillae and a lower full implant supported overdenture on Straumann implant.

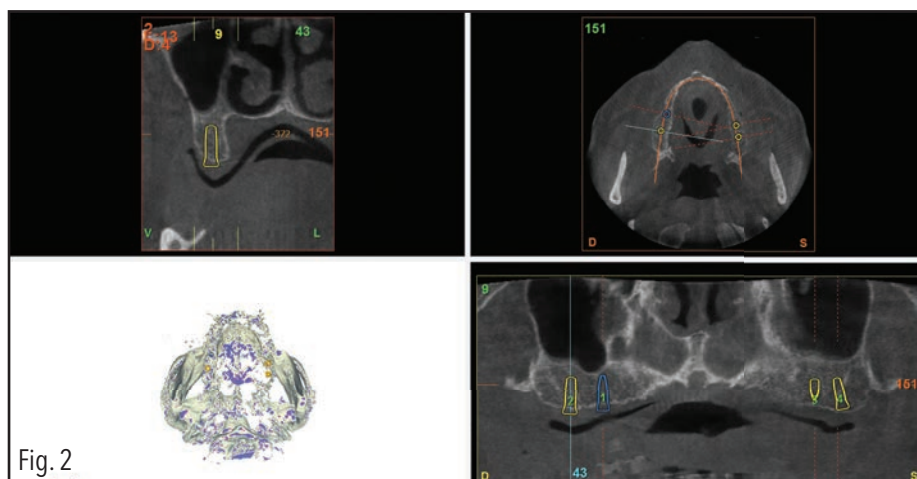
The patient requested for a more stable and comfortable prosthetic rehabilitation compared to the prostheses he is using since several years.

Clinical and radiographic examination of the upper jaw with a CBCT (Fig. 1 - 6b); show an extreme atrophy of the premaxilla, confirmed by the stereolithography reconstruction (Fig. 7 - 10), while the posterior sectors have a very poor quality bone.

The medical and dental history revealed no local or systemic diseases that contraindicated the use of implants for a prosthetic support. Moreover, the patient was unwilling to stay without the prosthesis, demanded for a correct osseointegration of the implants.

The treatment plan proposed to the patient thus provides rehabilitation with overdentures on bilateral bar in the posterior maxillary areas.

This therapeutic approach allows us a type of surgery less invasive and



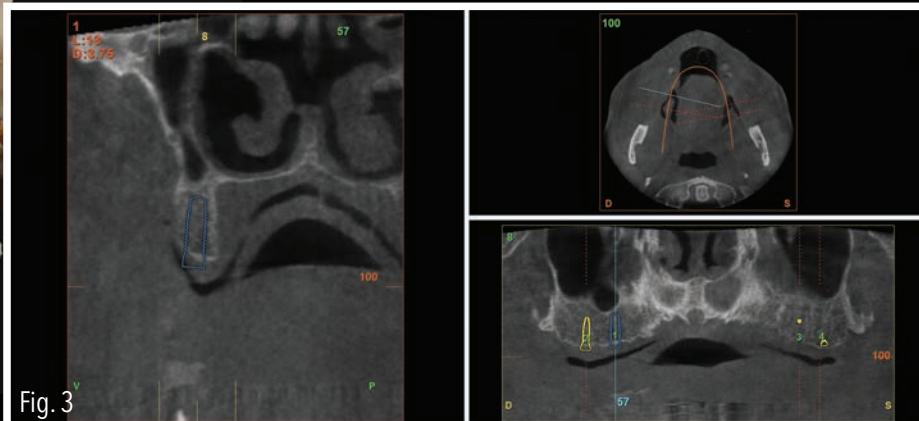


Fig. 3

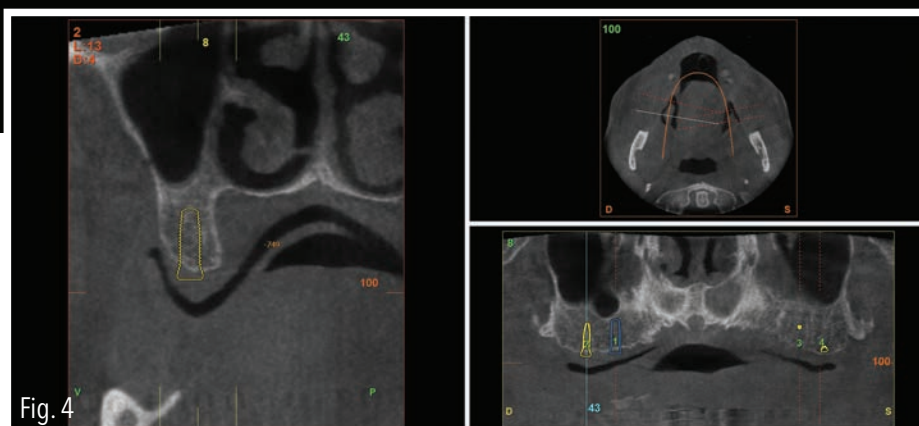


Fig. 4

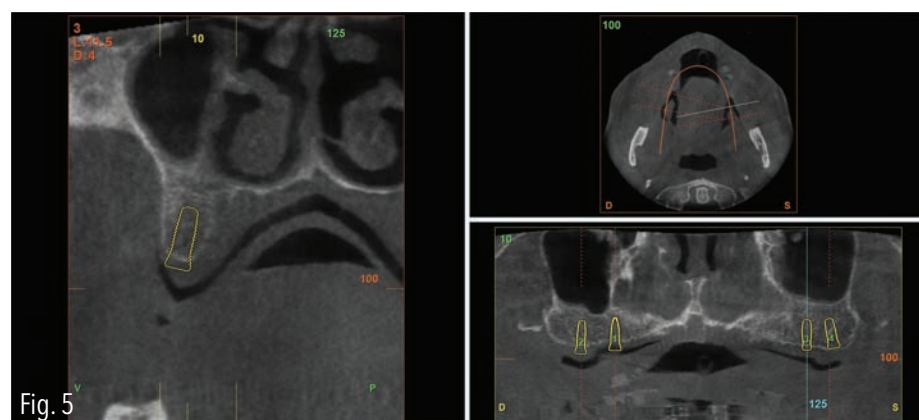


Fig. 5

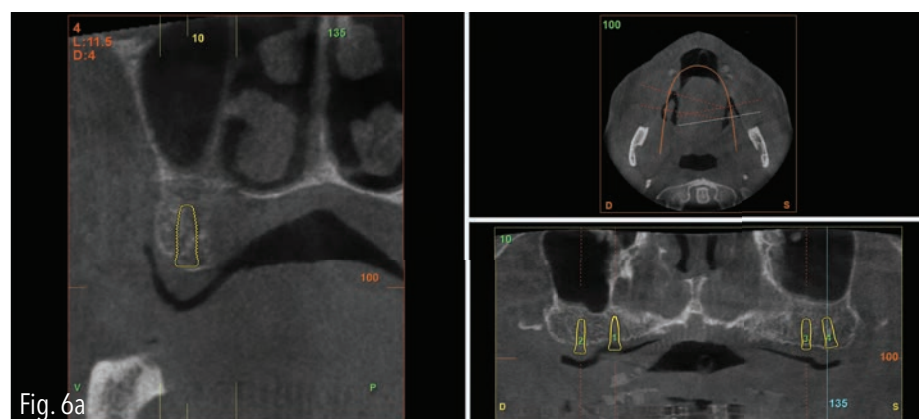


Fig. 6a

more comfortable for the patient during the period of osseointegration of the implants.

The D4 class bone was prepared with manual expanders activating the alveolar bone with autologous growth factors prior the insertion of the implants trying to improve the primary stability (Fig. 11, 12, 13).

After the insertion and osseointegration of the 15 and 17, 25 and 27 implants, an impression in alginate is made to create the individual trays using a light-curing resin. After pouring the master models, the occlusal wax rims were produced.

Once the occlusal relationship is registered, the horizontal plane, vertical plane, smile line and middle line, we transfer the wax rims with this values onto the articulator Stratos Ivoclar mounting the upper with the aid of the horizontal plane and consequently the lower model.

Using the Form Selector and taking into account the shape of the patient's face, the NFC+ teeth form 666 for the upper and 996 for the lower were chosen for the anterior teeth, while for the posterior teeth it was decided to mount the Bonartic NFC + with A2 shade to be later characterized.

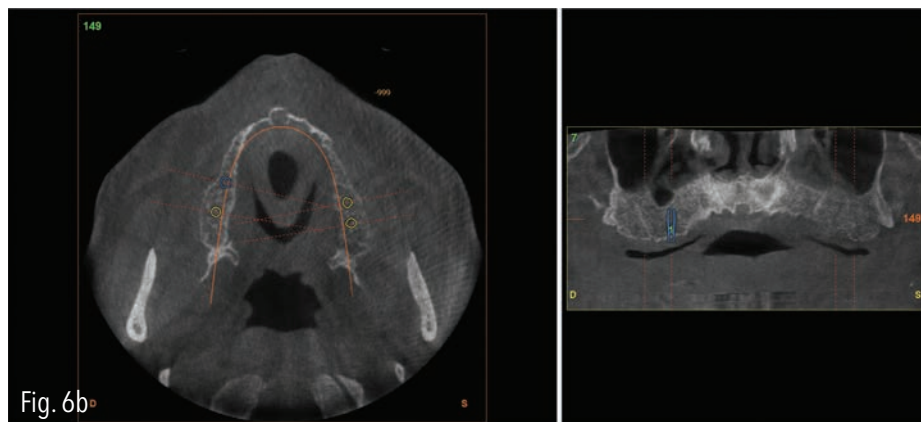


Fig. 6b



Fig. 7

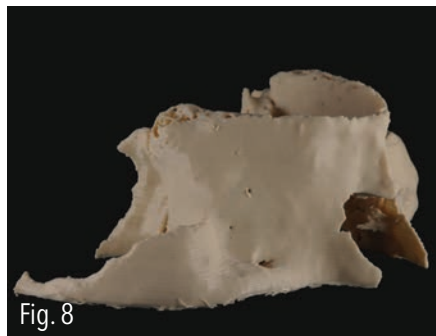


Fig. 8

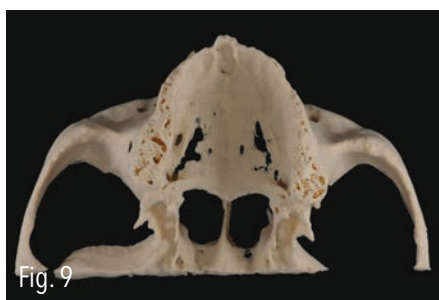


Fig. 9

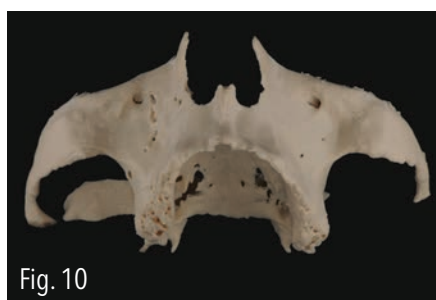


Fig. 10

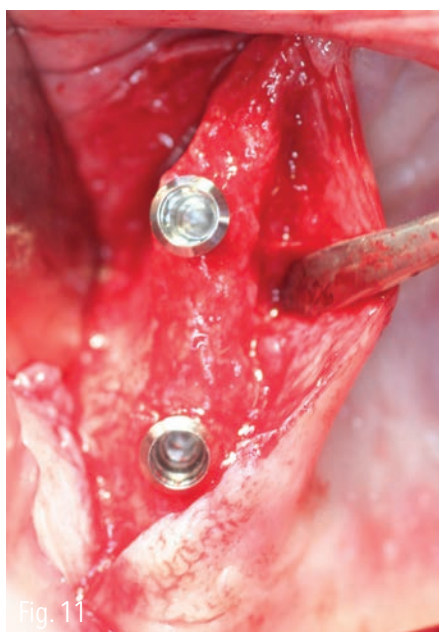


Fig. 11

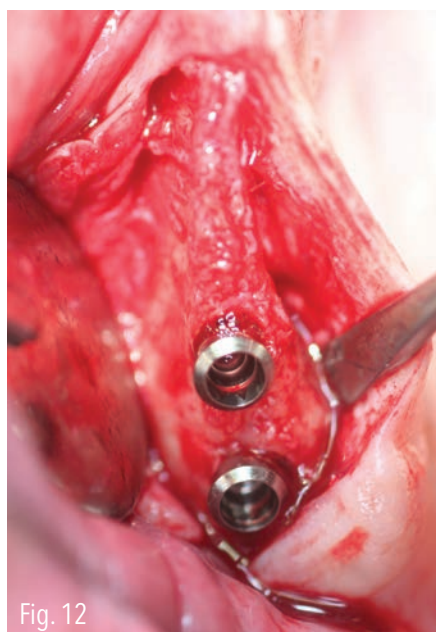


Fig. 12

The color of the mucous membrane was determined in the Aesthetic Candulor resin color 34 and 55.

We proceed with the upper diagnostic set-up by following the technique of the Prof. Reiner Strack and consequently the lower set-up used as guideline for the bar and the counter-bar.

After the functional and aesthetic parameters (occlusal plane, smile line, medial line and phonetics) are checked, we proceed to the design of the bars with CAD software, using the diagnostic set-up as a reference for the available volumes. During the CAD design, the Rhein 83 Ot cap micro threaded attachments (239 SFM) were placed (Fig. 14 - 17).

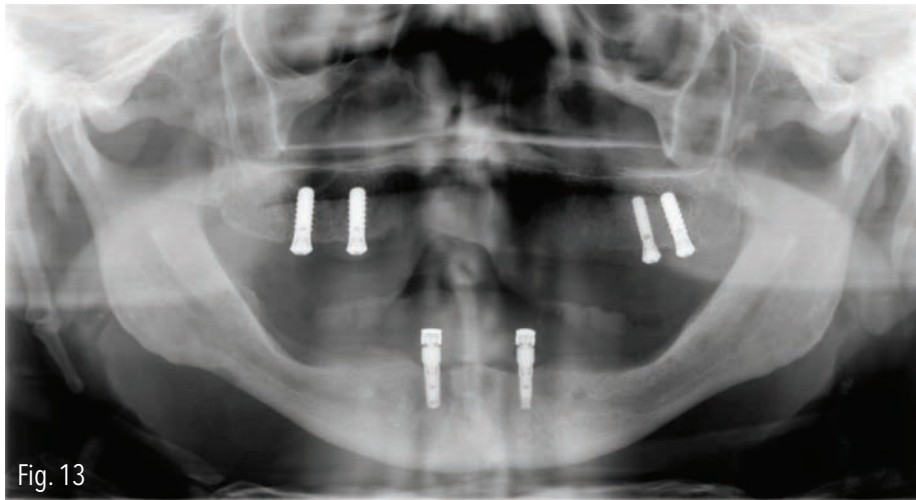
After the design is determined and milled with a castable material, we proceed with the casting with chromium cobalt alloy type 5. After an accurate finishing and polishing, it is shipped to the studio for the try-in test with the X-ray control (Fig. 18, 19). An individual resin tray is then produced in order to proceed with the impression of the bar's position.

After the finishing and polishing a second try-in test was performed with the bars on which the Rhein'83 micro threaded OT CAP were screwed and the counter-bar in which the Rhein'83 micro OT CAP transparent caps (standard retention) were inserted.

After the final set-up of the teeth, incorporating the counter bar the final occlusal try-in is performed on the patient.

The modeling of the collars, flanges is performed and the flasks with a silicone with high accuracy of the details modeled prepared.

Some aesthetic resins was prepared using the basic color mixed with N. 34 and 55 powders; for the collar resin it was used a mix of coloring powders N. 53 and 55. Some drops of red intensive characterize our implants were used to make them as natural as possible; this would allow a better integration into the patient's oral cavity. The hand polishing was followed by the finishing and characterization of the teeth. The dentures were then delivered to the patient along with the upper bars and



the lower denture with two Rhein'83 sphero Block spherical attachments with white transparent caps (Fig. 20 - 25).

Conclusions:

The patient declared to be very satisfied with the rehabilitation; this also thanks to the elimination of the palate that was present in his previous prosthesis.

In the follow-ups it was verified the stability, phonetics, the good smile line and the proper support of the lips.

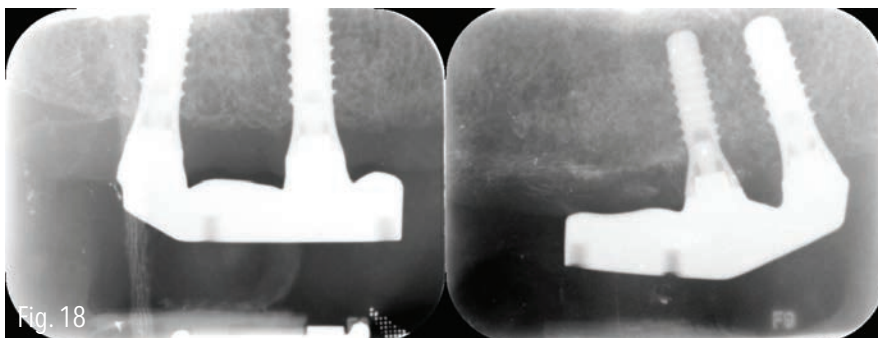
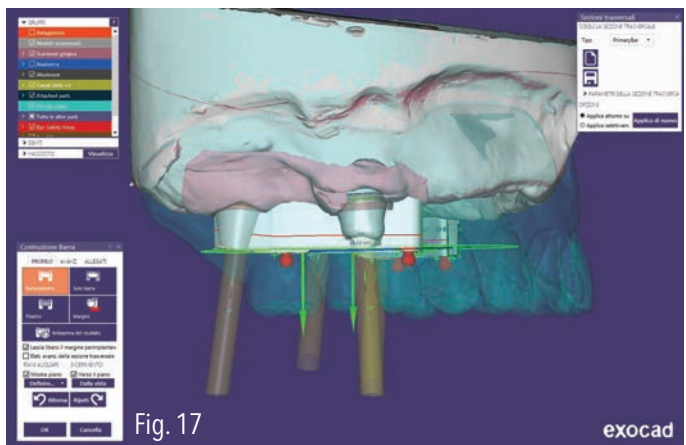
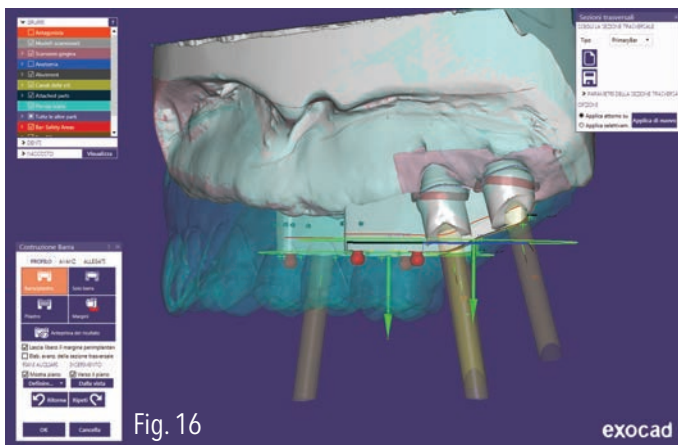
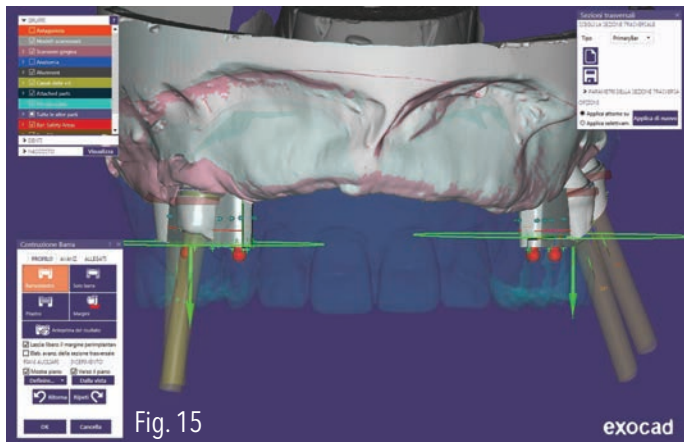
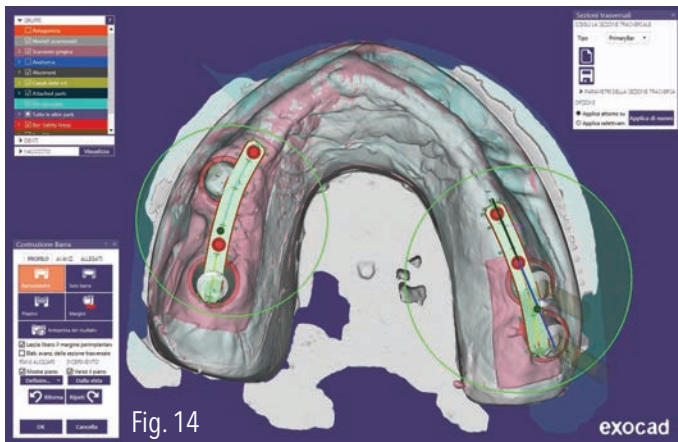




Fig. 20



Fig. 21



Fig. 22



Fig. 23



Fig. 24



Fig. 25

About the authors:

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He attended several congresses and national and international courses in oral surgery, implantology, periodontics and prosthetics.

Gabriele Poma, born in Bergamo, in 1988, resident in Calcinato (BG). He graduated as dental technician in 2012, at the Institute Leonardo da Vinci (Bergamo). Employed since 2010 in the SDA "Studi Dentistici Associati" Laboratory; trainer in the Sirona Digital Academy since 2014. Main activity practiced: CAD-

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Giorgio Poma, born in Bergamo on the 23th.10.1980, resident in Calcinato (BG). He graduated in 1999 as dental technician at the institute Professional Leonardo da Vinci (BG). Employed since 2009 in the SDA "Studi Dentistici Associati". Main activity practiced: specializes in removable prosthetics and overdentures on implants.