

labline

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&
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**A NEW
APPROACH**

JOSHUA
POLANSKY

**DEMYSTIFYING
THE SINGLE
CENTRAL
METHODS**

DR. JON
GURREA
&
AUGUST
BRUGUERA

**GONE IN
48 HOURS**

DR. JORDI
MANAUTA
&
DR. GAETANO
PAOLONE
&
DR. WALTER
DEVOTO

IN 'N OUT

Pietro VENEZIA, MD

Pasquale LACASELLA, ODT



POST-EXTRACTIVE AND
DIAGNOSTIC REMOVABLE
REHABILITATION

A NEW APPROACH



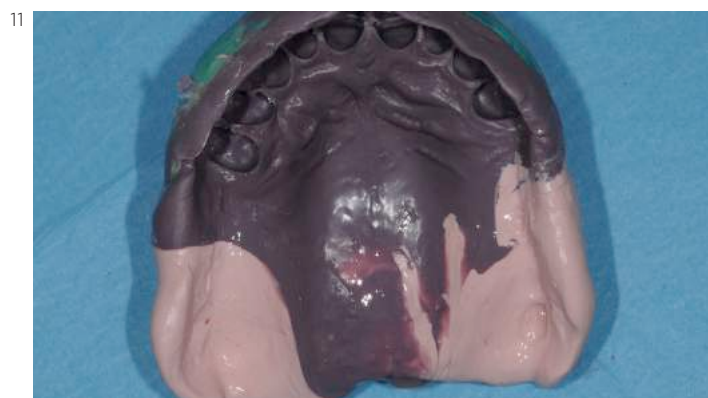
Prosthesis is playing an increasingly important role in modern dentistry. The introduction of new materials (teeth, resins, composites for characterisation) allows the achievement of functional and aesthetic excellence, fundamental when treating patients with very high expectations.

The role of rehabilitation with removable prosthesis is even more important in patients who are to receive complex implant-prosthetic treatment. The ideal position of the teeth (phonetics, occlusion and aesthetics) is tested and then replicated in the implant-retained prosthesis.

This article describes the procedures for the construction and functionalisation of post-extractive and diagnostic rehabilitation and the technique for obtaining a simple, predictable and rapid finalisation of the case.



The case of a 52 year old lady suffering from severe periodontitis in the terminal phase was brought to our attention. The patient complained of remarkable mobility in the residues of upper teeth. The two lower roots preserved for anchored root overdenture were mobile. The first phase of therapy focused on the study of the prosthetic case: photographic and radiographic investigations were carried out, and panoramic alginate impressions were taken both for the upper and lower jaws. **(Fig. 1-10)**



Particular attention was paid to the aesthetic analysis, especially facial, dento-labial and phonetic analysis. Parallelism between the pupillary and commissural lines was evaluated on the facial plane, as well as the relationship between the e-line and lips on the sagittal plane. Severe periodontal disease had imposed a clear lack of verticality in the inter-incisal line.

The analysis showed a 7 mm dento-labial dental exposure of the upper front teeth at rest, a trend of the incisal ridge to an incongruous and non-symmetrical profile, and dramatic labial inclination of the upper incisors so as to prevent correct closure of the lips

The smile line was high as the extrusion of frontal teeth had led to a higher coronal migration of soft tissue. The smile was wide and the corridors sore. Phonetic feedback confirmed the loss of vertical dimension and the existence of a useful space for increasing it; the incorrect position of the upper front teeth occupied all the visible space during pronunciation of the phoneme "E". The resulting aesthetics analysis has been marked in a special folder. It was the desire of the patient to receive a post-extractive removable prosthesis on the same day as the surgical procedures.

Alginate impressions were developed in the laboratory and a tray built, which after being functionalised was used to make an impression which was subsequently used as a template for polyether material (Impregum-3M ESPE) and zinc oxide-eugenol paste (SSWhite-Kerr). The lower impression was made in polyether, after treating the tray with adhesive specifically for this purpose. **(Fig. 11)**

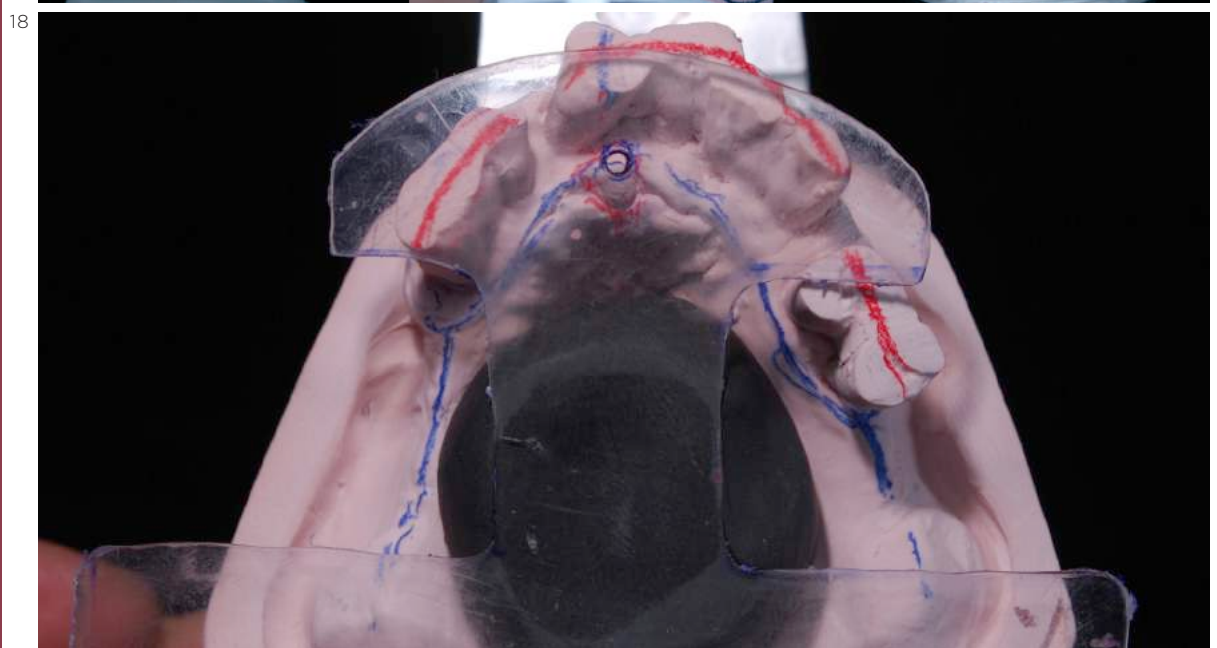
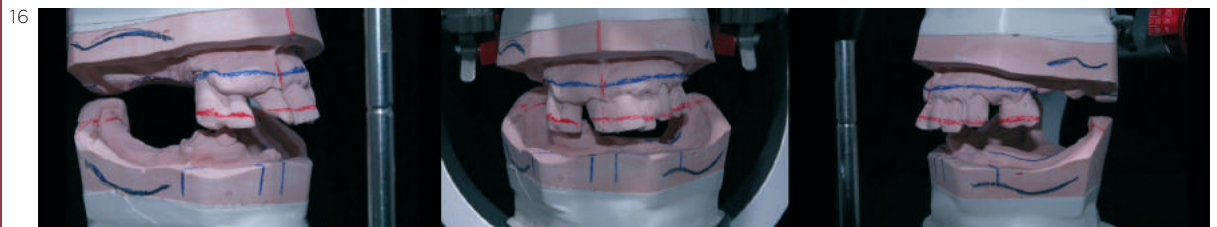
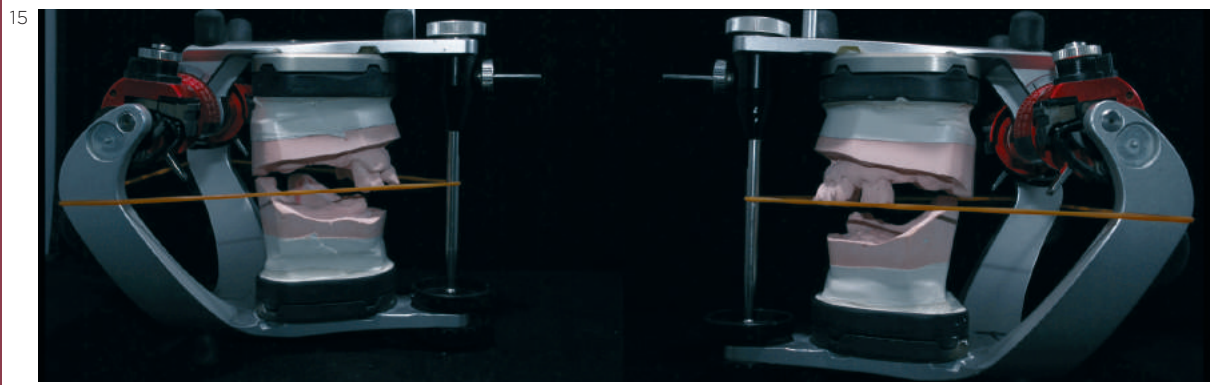
Wax rims designed on a self-polymerising resin base were made from the master models obtained **(Fig. 12)** and intermaxillary relations were recorded. **(Fig. 13-14)**

Face bow was found and the models were mounted in the articulator.

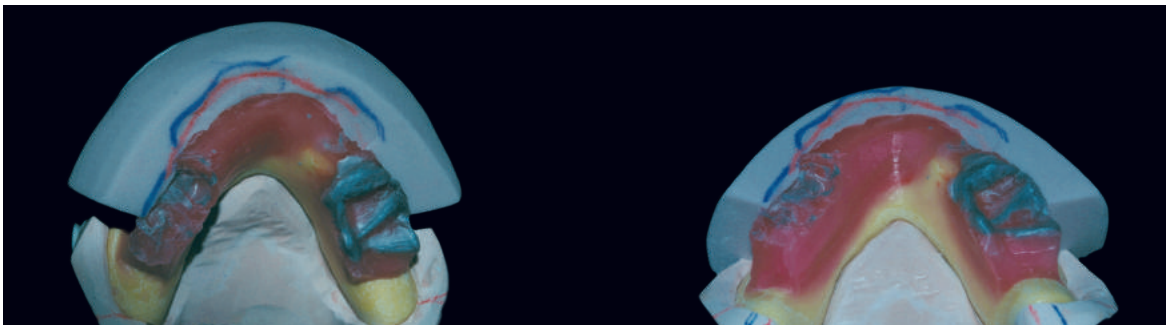
Analysis of the models took previously performed aesthetics into account: front elements were shortened as clinically indicated and their position set to about 10 mm from the incisive papilla in accordance with the feedback phonemes.

The models were treated by removing teeth while paying attention to the gum peaks in a manner as to avoid the prosthesis putting pressure on the soft tissues in the early stages of healing.

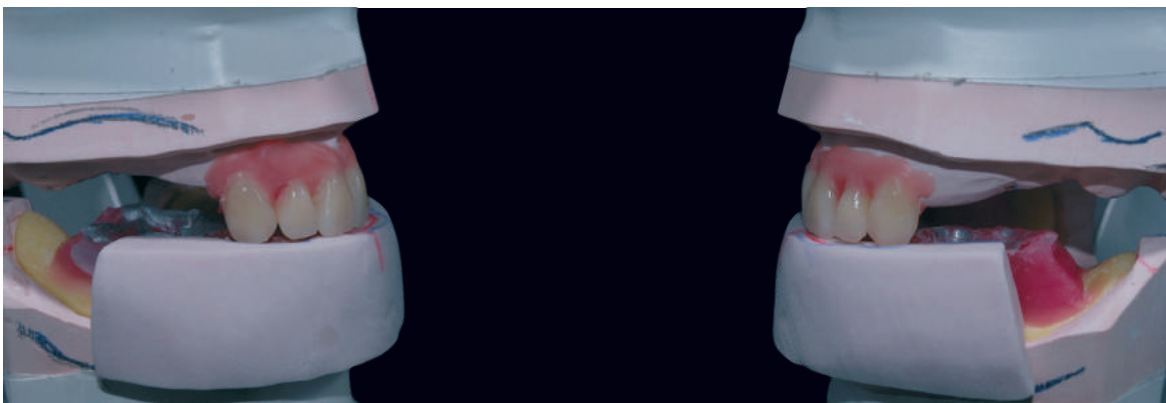
The mounting was completed according to a combined occlusal scheme: semi-anatomic upper teeth (18°) and t plane lower teeth (0°) (Ivoclar Vivadent). **(Fig. 15-24)**



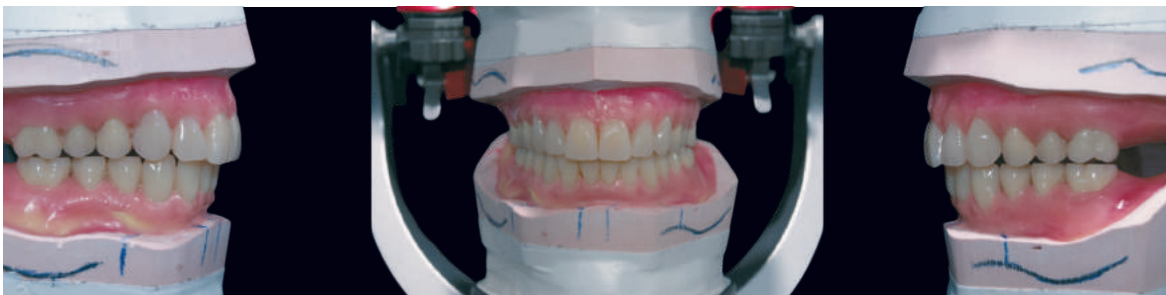
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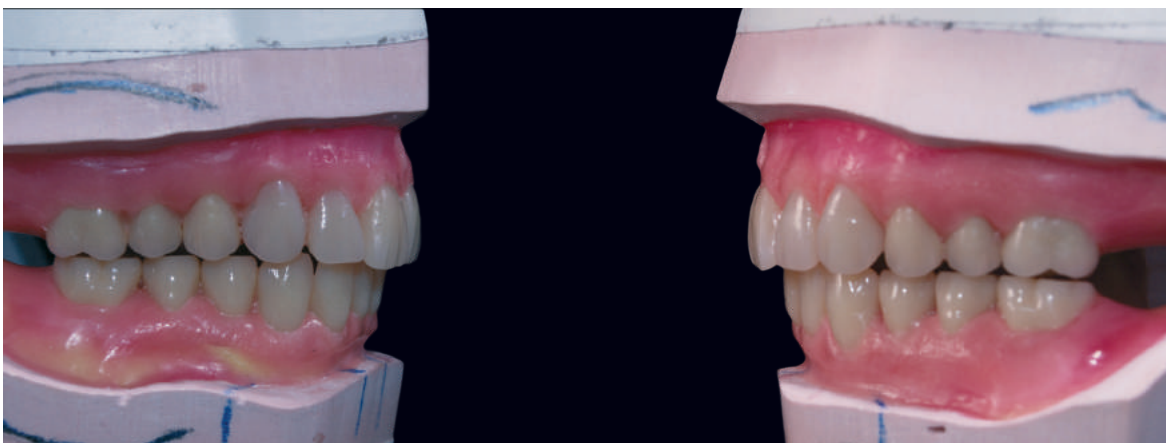
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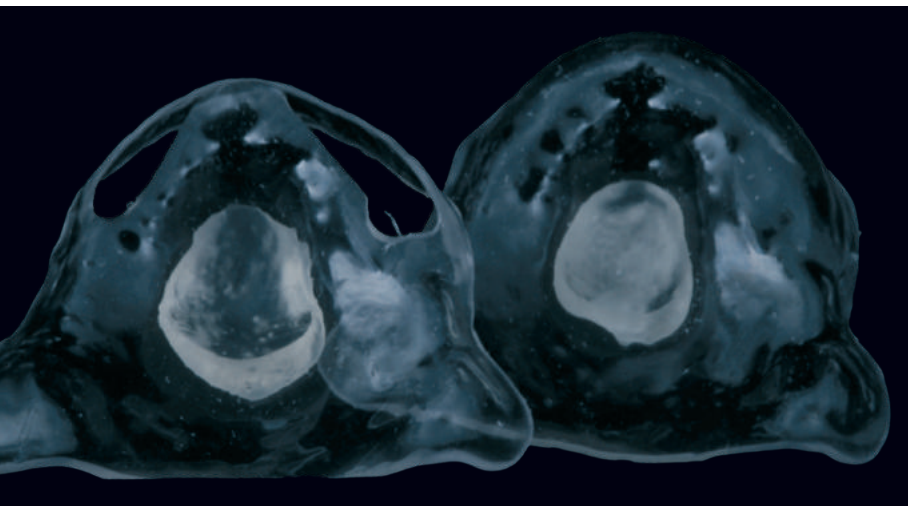
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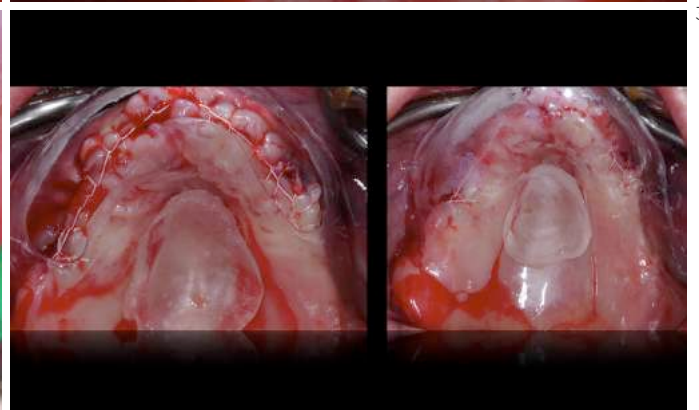
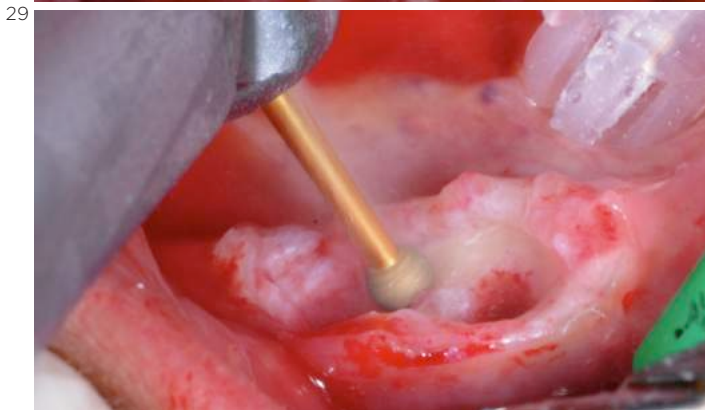
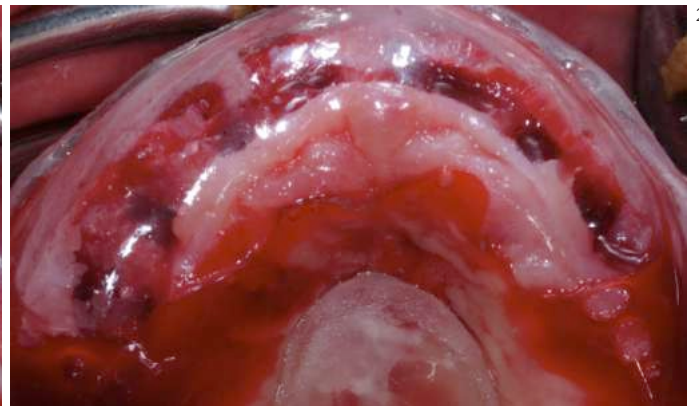
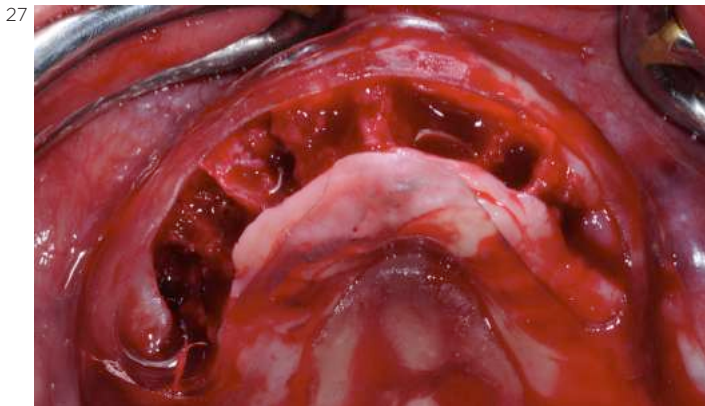
25 A 22 mm over-jet was assigned. An over-bite was not planned in order to avoid interference in protrusive movements: muscle reconditioning was targeted as-similable to that operated by the bite-plane in the case of a fixed prosthesis.

The aesthetic and functional assessments allowed us to design osteotomy in the pre-maxilla. Two templates were packaged for this purpose: a surgical and open one used for the surgical stage, and the other, a copy of the denture base to be used to evaluate the possibility of passive seating of the post-extraction prosthesis before execution of the sutures. **(Fig. 25-26)**



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Extraction of all the dental elements and roots was carried out, osteotomy was performed, a transparent template was tested and it did not reveal areas of compression. Sutures were performed and the prosthesis delivered. **(Fig. 27-30)**

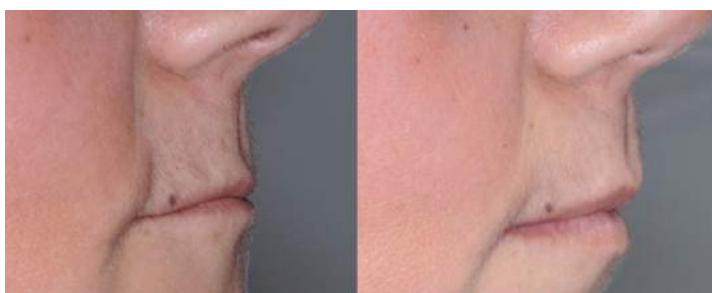




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The support of the perioral tissues soon seemed adequate. **(Fig. 31-35)**

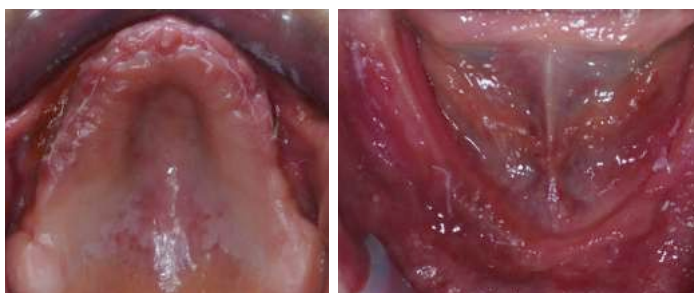


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This assessment was confirmed in the control appointment when the sutures were removed: the phonetic tests have confirmed the aesthetic and functional correctness of the prosthetic project. The tissues in contact with the prosthesis experienced no suffering. **(Fig. 36-40)**

The patient was checked approximately every 2 weeks, and as was expected a slight mandibular backing was observed that has been gradually stabilised creating pits in the lower teeth corresponding to the upper lingual cusps.

(Fig. 41-43)



Adaptation of the perioral tissues was evaluated after four months. A replacement was made in consideration of new aesthetic parameters. Occlusion and new contacts were restored in centric relation.

(Fig. 44-53)



Perfect occlusal stability, aesthetics and phonetics were determined after two months, the patient's dentures were duplicated in a clear methylmethacrylate resin and these duplicates were used to perform cross mounting in a removable prosthesis according to our SER technique (Simplified Edentulous Rehabilitation): acrylic teeth were replaced by those on the market (Phonares II – Ivoclar Vivadent) without losing any of the parameters already tested: shape, position and occlusion. **(Fig. 54-63)**



An aesthetic test was performed and the prostheses were delivered without performing occlusal retouches and to the maximum satisfaction of the patient. **(Fig. 64-73)**



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MD **PIETRO VENEZIA**

Pietro Venezia graduated with honours in Dentistry from Bari University of Dental Studies in 1989.

He was trained by attending courses held by Dr. Gaetano Calesini and Dr. Mauro Fradeani.

FROM 2002 to 2006 he participated in the continuing education programme at the Institute for advanced Dental Studies (Boston, USA) directed by Dr. Myron Nevins.

In 2003 he specialised in Aesthetic Adhesive Prosthetics at Siena Dental University.

In 2007 he attended the Oral Health Center of the University of Southern California, headed by Prof. Pascal Magne.

In 2009 he specialised in prosthodontics at the University of Bari, where he completed coursework in the same year.

Since 2009 he has been an active member of the Italian Academy of Prosthetic Dentistry (AIOP) and S.I.O. (Italian Society of Osseointegrated Implantology).

Director of study group: I.T.I Salento.

Alongside his clinical activities, he is involved in teaching and keeping up with advances in terms of aesthetic prosthesis, removable and implant-supported prostheses from the courses division of his office location in Bari.

He has been a speaker for courses and conferences in Italy.

He carries out his professional activities, limited to the field of prosthetics, in Bari and Altamura (BA)-Italy



ODT **PASQUALE LACASELLA**

In 1985 he graduated as a dental technician from the Institute of Bari IPSIA Santarella. He specialises in REMOVABLE PROSTHESIS. He has deepened his knowledge by attending numerous courses and seminars given by experts from different schools of thought (Prof. Slavicek, Prof. Glauco Marino, Prof. Passamonti, Prof. Ball, Dr. L. Bortolotti, G. Garotti, Dr. Della Pietra, A. Zollo, J. Stuck, et al.).

He deals with preimplantation design aimed at complex rehabilitation. He is a co-owner of the laboratory Apulia Digital Lab snc in Bari' socio AIOP and SICED. In 2011 he received third prize in the Premio Roberto Polcan at the XXX International AIOP Congress held in Bologna. He is the author of articles on dentures published in national and international journals.

He is a lecturer at the International Centre for Dental Education (ICDE) of Bologna.



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