



# labline

DENTAVANTGART

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## INTERVIEW

INSPIRED BY  
NATURE:  
CHRISTIAN  
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ZTM. **JAN-HOLGER BELLMANN** &  
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A BALANCING ACT  
BETWEEN FUNCTION  
AND AESTHETICS:  
A THIRD DIMENSION  
OF A SMILE

DR. **ATTILA BODROGI** &  
CDT. **SIMONE MAFFEI**

BESPOKE SMILE  
MAKEOVER:  
A FACIALLY DRIVEN  
APPROACH TO  
INDIVIDUALIZED  
OUTCOME

DR. **CYRIL GAILLARD** &  
CDT. **JÉRÔME BELLAMY**

FULL FUNCTIONAL  
AND ESTHETIC  
MINIMALINVASIV  
RESTORATION  
USING IPS E.MAX  
CERAMICS



Rafael Santrich

**STRENGTH** = Prettau® Zirkon

&

**ESTHETICS** = e.max Ceram

## Gerardo



1 The original situation of the patient.

The 55-year-old patient, who has an old bridge causing discomfort, came to the dental clinic for a routine check-up. Unfortunately, the dentist found open margins, caries, periodontal problems, etc. A CT scan was taken and the decision was made to remove the remanent teeth.

Based on the treatment plan, after the extractions, nine implants were going to be placed. The surgery was performed in segments, applying piezo surgery. First, we placed a bone graft in the anterior zone and we let it heal. Temporaries were put on the posterior teeth and six months later the implants were placed and loaded in the posterior area. Before the implant placement, a sinus lift surgery was necessary to be performed. After checking the results of the surgery, we decided to load the nine implants.

From point "A" to "Z" the patient wore a temporary that has the same design as the final in order to avoid any problem with the final restoration. It is important to treat the patient with something similar to the final prosthesis to avoid creating false expectations.

A Zirkonzahn Zr frame with individual e.max press monolithic crowns was decided to be made for the posterior quadrant and cut back technique for the anterior quadrant. Shade A1 was used chosen by the patient himself.

We believe we could find the best possible combination of the strong (e.max) and even stronger (Zirkonzahn Prettau®) materials, while using the more aesthetic techniques of both systems. For the pink part we used the e.max ceram: at least ten different shades are available from the intense pink to the more regular pink to make everything look more natural. My Smile Line shade guide was created to make the process customized. The only difficulty we have to face about the pink part or any ceramic over the Zr prettau frames is the special program that needs to be used (350°C Dry temp – 35°C heat rate – 750°C final temp – cool down 35°C per minute – final temp 350°C). We need to keep in mind that Zr has a poor level of heat conductivity therefore that special program has to be used.





**2-3** The result of the CT scan.



**4** The situation of the patient after removing the old restoration and with the new implants in place.



**5-6** Seven months after the extraction and implant placement. Then we proceed to fabricate the temporaries following the protocol of making a denture (Teeth try in – check midline – occlusal, planes, etc.)



**7** Prettau Zr Bridge try in. This frame is created when we have the temporary.



**8-10** Different views of the frame in mouth.



**11-15** Wax try in, to observe the dimension, gingival and incisal position of the teeth. (Smile Line, Gum Line, Phonetics) Critical appointment.





**16** Face of the patient to see the sizes and shapes of the teeth matching his personality.



**17** E.max press individual crowns fitted over the Zr Prettau Bridge.



**18-19** We proceeded to apply e.max Ceram Pink Porcelain. IG2-G3 & G4-OE4 are combined to get a natural color.



**20** Finished pink porcelain with e.max crowns in place.



**21-22** We prepared the monolithic part to be glazed and made a cut back for the anterior crowns in order to create more esthetics.



**23-24** We have to finish (glaze and color) the monolithic part before applying any ceramics. These steps are important because we need to create bonding between the monolithic and the ceramic parts. Some enamels and opals are applied to create a natural looking (OE4-OE1-OE5 & T1).



**25-27** Crowns are contoured and polished with rubber wells (Komet).



**28-29** All crowns are glazed and polished. Posteriors are monolithic e.max. crowns to maintain the strength of the material (E.max Press 400 MPA).





**30-33** Close up of the case in different aspects.



**34-39** The crowns are inserted and the case is finished. Now we can see the patient's mouth and how natural it looks from different angles. We need to keep in mind that we can't be invasive in the palatal part because we can incur in phonetic problems (Fig. 39).



### **RAFAEL SANTRICH**

Born in Cali, Colombia.

Owner of his dental laboratory in Aventura, Florida.

Specialized in: all fixed restorations and custom cosmetics, expert in CAD/CAM

#### **Achievements:**

- Ivoclar at the LVI Institute and Nobel Rondo by Nobel Biocare Press Technology: Certifications of E-Max and Empress by.
- 2005–2006: GC America: Key Opinion Leader
- 2007: Nobel Rondo (Nobel Biocare): Instructor with Ernst Hegenbarth, MDT.
- 2010: Florida Dental Laboratory Association: E-max lecture in Spanish, USA
- 2011: Florida Dental Laboratory Association: IPS Inline lecture
- Pikos Institute: Technical Instructor in two programs given by Dr. Michael A. Pikos of "CT Diagnosis and Treatment Planning with Interactive CT Software"
- Currently: consultant for Sirona and the only Latin offering certified courses in Spanish for Ivoclar Vivadent in U.S.
- Completed Several Digital photography courses organized by Dr. Ed McLaren, Claude Sieber MDT, Felix Pages CDT.
- 2012: Ivoclar USA: Course on The Implant Esthetics Center Of Excellence, Sarasota, Florida

Currently he is a member of American College of Prosthodontics and a member of the Colombian Academy Honorary of Osseointegration.

#### **Publications:**

- Book: Case publication "Soft Tissue and Esthetic Consideration in Implant Therapy" written by Dr. Anthony Sclar. 2009:
- Realities Implants Volume 1, 2009 of ITI.
- 2011: IDT (Inside Dental Technology) in January and April editions  
LMT (Lab Management Today) in November edition
- 2012: "Scoop technique" in the JDТ (Journal Dental Technology) and Oral Health in Canada for First Edition. June/July: "The Finesse Of The Pink & The Power Of IPS e.max" in the JDТ USA
- 2013: "The Finesse Of The Pink & The Power Of IPS e.max" in Germany



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Thanks so much.