A Challenging Class II Restoration

By Dr. Stergios Zafiriadis, DDS, Switzerland

About the Case
A cusp fracture on the lower second premolar brought this patient to the office. The large amalgam restoration was removed, and secondary decay noted. Once the existing amalgam and decay were removed, the remaining tooth structure indicated a very large, very challenging Class II restoration was required.

Challenge
Traditionally, a restoration of this size would require an incremental placement technique in which several time consuming layers would be required. In addition, this adds to the chance of contamination of the tooth, or contamination between layers of composite. Bulk placement of Filtek™ Bulk Fill Posterior Restorative allows this restoration to be completed in one increment, making the procedure more time-efficient.

The 3M Difference
Completing a restoration of this scale can be challenging. Filtek™ Bulk Fill Posterior Restorative enables one-step placement up to 5mm for fast and easy posterior restorations.

Fig. 1: Preoperative. Broken cusp and secondary decay are evident on this lower second premolar

Dr. Stergios Zafiriadis has received honoraria from 3M.

Step by Step

Fig. 2: The tooth has been isolated and prepared

Fig. 3: Enamel is being etched using a selective etch approach. A universal adhesive will be used to etch and bond the dentin

Fig. 4: After rinsing, Single Bond Universal Adhesive is being applied to the etched enamel and the unetched dentin. After solvent evaporation, the adhesive is light-cured

Fig. 5: Filtek™ Bulk Fill Posterior Restorative, shade A3 was then placed in a single increment

Fig. 6: Contouring was accomplished using traditional hand instruments

Fig. 7: It was then cured according to the instructions for use

Fig. 8: Sof-Lex™ Discs were used to help contour interproximally

Fig. 9: Sof-Lex™ Spiral Polishing Wheel is excellent for polishing occlusal surfaces

Fig. 10: The final restoration

Polish with diamonds. Skip the paste.
A difference that you can see!

By 3M

How much time and effort do you spend creating beautiful smiles? Whether you currently use a rubberized finishing and polishing system or an intraoral diamond polish, the process can be time-consuming. And, even with your best effort, the gloss may not last. 3M has a simple solution for both problems, using two of our innovative technologies.

Forget the paste. Sof-Lex™ Pre-polishing Spiral prepares the restoration for final gloss, while diamond-impregnated polishing spiral gives your restorations that gorgeous paste-like gloss. The system offers the convenience of a rubberized system while also adapting to all tooth surfaces.

You’ll be happy to know that while the spirals are effective, they’re also kinder to gingival tissues—and maintain the integrity and anatomy of your restorations.

When patients leave your office smiling, you’ll marvel at how simple it’s become to create beautiful, natural-looking esthetics.

*Compared to other finishing and polishing tools.

Sof-Lex™ Pre-Polishing Spiral
The pre-polishing spiral (beige) smooths and removes scratches in restorations that develop during contouring and prepares the surface for high-gloss polishing.

Sof-Lex™ Diamond Polishing Spiral
The diamond polishing spiral (pink) contains diamond particles to create a smooth, high gloss polish.

To learn more about Sof-Lex™ Diamond Polishing System please visit www.3M.com/dental
Takes less time, so you have more time.

There are things in life you don’t want to miss. And the more complicated a procedure is, the greater chance there is for something to go wrong and disrupt your day. That’s why 3M Oral Care has simplified posterior restorations ... the most frequently performed direct restoration. By using Filtek™ Bulk Fill Posterior Restorative with three other innovative products, you’ll move through posterior restorations with speed and simplicity. See how our Posterior Restorative Procedure can help keep you on schedule ... because we know your time outside of work matters.

www.3MGlobal.com/espe
Celtra® Press – Makes the difference

The new generation of high strength glass-ceramic, zirconia-reinforced lithium silicate (ZLS), is now available in a pressable version

By Dentply Sirona

Celtra® Press is the new class of zirconia-reinforced lithium silicate material available to labs for pressing. This unique material provides top aesthetics and is virtually impossible to tell apart from a natural tooth.

Dentply Sirona has been supplying Celtra® Duo zirconia-reinforced lithium silicate, in the form of CAD/CAM blocks for CEREC and intah machines, since 2013. Celtra® Duo can be processed with two alternative methods. The first method follows CAM processing, milling and only requires one single polishing stage before final placement. This method offers a restoration of around 200 MPa in just 15 minutes. Alternatively, the material can be stain/glass fired to achieve the strength of lithium disilicate (90 MPa). Each method can be selected according to the required degree and desired strength of the restoration, providing flexibility and speed.

The launch of Celtra® Press now allows laboratories to benefit from the unique microstructure of ZLS in the traditional pressing procedure. With its strength in excess of 500 MPa, it allows laboratories to set a new benchmark in the high strength glass-ceramics segment. The 10% porosity is already dissolved in the glass matrix and the power firing (which in the case of monolithic restorations, forms part of the stain/glass firing), provides this exceptionally high strength. Owing to the good surface texture, intraoral polishing is possible.

In addition to its high strength, Celtra® Press creates unmatched aesthetics. The high glass content and fine crystalline structure provides outstanding light-optical properties. Thanks to this combination of high translucency and opalescence, Celtra® Press exhibits an amazingly natural chameleon effect which allows restorations to blend into the natural dentition extremely well. During the development of Celtra® Press, a great deal of attention was paid to an exact match to the VITA shade system for excellent shade accuracy and reproduction. The HT, MT and LT translucency shades are closely matched and permits users to reliably reproduce the desired degree of translucency.

Equally important, Celtra® Press is available to labs for additional customisation. When used with the specially developed Celtra® Press investment, only a minimal reaction layer forms during pressing which is already sandblasted off during devesting. Further pickling in acid or sandblasting is no longer required. Thanks to the precision of fit, fine and homogenous surfaces as well as “soft” devesting properties, users can work quickly and reliably.

The low viscosity of Celtra® Press provides optimum flow properties so that only one pressing sprue needs to be attached. This is applicable for the entire indication spectrum including up to three-unit bridges on second bicuspids in the anterior region. Even the most delicate of structures and restoration margins are reproduced accurately.

For more information, please contact your local Dentply Sirona representative, or for background details on the press version of zirconia-reinforced lithium silicate please visit www.celtra-dentsplysirona.com

By Interdent

With almost 40 years of experience, a vision to produce quality products and an environment in which the user plays the decisive role, Interdent this time presents CAD/CAM technology, which offers unlimited possibilities.

The company’s vision has always been to keep track of new trends in dental care. CAD/CAM technology has been on the market for over 20 years; however, despite its initial “boom”, it developed rather slowly. In the last few years we have also added smaller units like CC COSMO+ CC COSMO STAR, CC TRENDY and CC CHIC milling units, which will be available to users of various profiles. The needs of dental technicians across the world differ greatly and primarily depend on the existing capacities and development of a dental laboratory. The needs of a laboratory employing 200 people differ greatly from the needs of a laboratory employing 10 people. Since the company is focused on the international market, it adopted a broad perspective during development (Fig. 6).

This was the reason to make CC POWER, with its immense power of 2.4 kW, available to the most demanding users, as it will be able to operate 4/5 milling and/or precision units, while the compact CC COSMO+ will be intended for medium-sized laboratories that will largely use the device for their own needs.

In the last few years we have also added smaller units like CC COSMO+ COSMO STAR, CC TRENDY and CC CHIC to our product range which differ from each other in the way they mill (wet/dry). This allows dental technicians to mill all materials or only the ones provided for many years and the satisfaction of customers is very high. (Fig. 3)

By means of the above, we took a step closer to existing and future users of CAD/CAM technology and we are happy to provide a comprehensive solution in CAD/CAM technology that features simple use, excellent technology and outstanding material. Since we believe that customer satisfaction depends not only on the quality of the product, but also on correct handling, the Interdent company reinforces everything with its PROFESSIONAL SUPPORT, which is available throughout the process, i.e. from your wish and idea for a purchase to training and rapid solutions to any problems encountered during use (Fig. 4).

For more information, please visit our web site www.interdent.cc or contact us on e-mail info@interdent.cc

We are looking for dealers in different countries.
EYE OPENING

Stellaris 3D
Superior CBCT for every indication

- Ready for Every Diagnosis
- Compact and Modern
- Power of Touch

Find out more on
www.fonadental.com
Aquamarine – A new level of cutting efficiency

By FONA Dental

Introducing Aquamarine by FONA, the diode laser which allows you to work with high precision and efficiency. Thanks to its 445nm wavelength, with higher absorption in haemoglobin, cutting is quicker and requires much less power. The result is faster treatment with minimised thermal damage and increased efficiency. Soft tissue surgery is more exact and inflammation less probable thanks to the haemostasis effect of Aquamarine.

Aquamarine can be used for a variety of treatments in soft tissue surgery, periodontology, endodontics and haemostasis. In addition, it can be used for single tooth whitening and as treatment option for a variety of indications. The built-in battery provides a mobile treatment solution for more than 1h of interrupted use.

High response touchscreen allows full overview of options and settings in 23 different languages. Aquamarine has pre-programmed range of treatments and the option to store up to 12 user settings for 2 separate users.

Sterile EndoTips and UniTips are ready to use out of the package without need for cutting or sterilization. The user can adjust the treatment angle by bending and turning the tip in the handpiece interface. ActiveTip is an optional solution for whitening and other activation treatments.

The diode laser operates at a wavelength absorbed by the soft tissue more efficiently, resulting in more precise cutting and faster healing thus increasing patient comfort. The focused beam treats the affected area in less time also limiting overall operational time.

Clinical trials in progress.

IDS In Cologne, 21-25th March 2017 – A great showcase for PD and the Map System!

By Produits Dentaires SA

As every 2 years, PD, Produits Dentaires SA has been exhibiting at IDS and this time, the Swiss Label Company focused on its medical device for endodontics. The accurate and reliable placement of Repair filling materials has become a key-asset in successful endo treatment and has put PD's MAP System under the spotlight. MAP System is the most reliable and efficient placement system for MTA, Biocementum, Calcium Hydroxide and other Calcium Sili- cates alike. It is accurate and enables to save on material cost by using just the right quantity, dedicated to perforations, pulp capping, apical closure, blood revascularization and surgery. PD organized more than a dozen workshops and lectures at its booth during IDS, introducing its rich combination of MAP products and its PD MTA White. Both Specialized endodontists and General Practitioners from many countries worldwide attended! Workshops and Conferences on the MAP System and PD MTA White are being currently organized everywhere in the Middle East. Contact your MAP Distributor for more info!

IDS In Cologne, 21-25th March 2017 – A great showcase for PD and the Map System!
According to results from Ivoclar’s recent survey of Cer- 
vitec F, the significant advantage of the combination 
product is that it saves time in the practice.

(Photograph: Ivoclar Vivadent)

Cervitec F survey: Results point 
to a well-liked product

By Ivoclar Vivadent

SCHAAN, Liechtenstein: In a survey 
recently conducted by Ivoclar Vi- 
vadent on its new protective varnish, 
Cervitec F, respondents commented 
favourably on its aesthetics, range 
of applications, delivery form, fluo-
ride and chlorhexidine concentra-
tions, and taste. Overall, the dentists 
reported that the significant advan-
tage of the combination product is 
that it saves time.
The survey invited dental profes-
sionals to rate the properties of the 
varnish, which was launched in all 
European markets in September 
2016 and is now available in Austral-
ia and New Zealand. “Their opinion is 
important to us,” a representative of 
Ivoclar told Dental Tribune Online. A 
total of 279 dentists tested and com-
mented on Cervitec F.

According to Ivoclar, more than 80 
per cent of the survey participants 
were generally satisfied or very sat-
isfied with the results of the varnish 
system, reporting that they would 
recommend using the product after 
professional teeth cleaning. Over 
half of the surveyed dentists also 
said that they would recommend us-
ing the product during orthodontic 
treatment for high-risk patients or 
patients with motor impairments. In 
addition, respondents indicated that 
they use Cervitec F for patients 
with root caries, implants or erupt-
ing teeth.

Cervitec F differs owing to its inno-

vative formulation, merging 1400 
ppm fluoride, chlorhexidine and ce-
tylypyridinium chloride, according to 
the company. This means that fluo-
ride application and bacterial control 
can be achieved in one working 
step, the representative explained.

According to results from Ivoclar’s recent survey of Cer-
rotec F, the significant advantage of the combination 
product is that it saves time in the practice.

By Shofu

SHOFU BLOCK HC & DISK HC

SHOFU BLOCK HC and SHOFU DISK 
HC, CAD/CAM hybrid ceramic restor-
ative material is created for diverse 
patient-specific digital fabrications 
ranging from inlays, onlays, over-
lays, laminates, anterior and 
posterior crown as well as implant 
supported prosthesis and mini-
mally invasive restorations. Homo-
geneous dispersion of novel porous 
micro-ceramic fillers in a resilient 
matrix imparts superior mechanical 
properties with exceptional durabil-
ity and shock resistant ability. Shofu 
Disk and Block HC are designed for 
fast and precise (dry or wet) milling 
into highly aesthetic, durable and 
shock resistant restorations that 
exhibit exceptional marginal adap-
tation and strong bond to natural 

tooth structure.

A class above in quality, SHOFU HC 
CAD / CAM restorative offers the 
unique flexibility of the in-office 
(SHOFU BLOCK HC) and in-lab 
(SHOFU DISK HC) versions, enabling 
you to select exactly what you need 
for your practice. Created through a 
rigorous manufacturing process, it 
is easy to polish to a stain resistant, 
naturally long-lasting lustre and al-
\allow intra-oral adjustment to be 
made to fine tune the restoration for 
the highest level of patient comfort 
and satisfaction.

The C-Silicone with A-Silicone qualities

C-SILICONE IMPRESSION MATERIAL

REINFORCED COMPOSITE BLOC FOR PERMANENT RESTORATION

SPEEDEX®

The C-Silicone with A-Silicone qualities

BRILLIANT Crios
High performance – made brilliant

7 days dimension stability -
Surface active -
Moisture control -
Optimized precision -

High flexural strength – resistant restorations -
Tooth-like modulus of elasticity – shock absorbing -
Wear resistant and gentle to the antagonist -

ANALOG OR DIGITAL