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.

Step by Step

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

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 applied to the etched enamel and the unetch dentin. After solvent evaporation, the adhesive is light-cured

Fig. 5: Filtek™ Bulk FR 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

Fig. 11: Preoperative. Broken cusp and secondary decay are evident on this lower second premolar

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.

You’re going to love how easy it is to create a beautiful smile!

*Compared to other finishing and polishing tools.

To learn more about Sof-Lex™ Diamond Polishing System please visit www.3M.com/dental
3M Oral Care

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.3MGulf.com/espe

Single Bond Universal Adhesive

Filtetk™ Bulk Fill Posterior Restorative

Elipar™ DeepCure-S LED Curing Light

Sof-Lex™ Spiral Finishing and Polishing Wheels
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 InLab 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 210 MPa in just 35 minutes. Alternatively, the material can be stain/glass fired to achieve the strength of lithium disilicate (570 MPa). Each method can be selected according to the indication 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, Celtra® Press offers a restoration of around 210 MPa, which is highly appreciated by dental technicians, since 2013. Celtra® Duo can be used smaller units like CC COSMO/COSMO STAR to edentulous patients, as it will be able to operate 24/7 and reliably reproduce the desired degree of translucency.

Interdent’s world of CAD/CAM technology

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 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. At the beginning, it was based on processing minor non-metal ceramic restorations, but there were problems concerning precision, speed and the choice of material available at the time. Today, the precision of gingival fit is already extremely fine, although differences remain between the systems. With adequate materials available, it is also possible to mill larger restorations, however, there are many systems on the market that fail to provide comprehensive systems for dental laboratories. Systems are limited to milling various materials and, furthermore, many providers charge licence fees, which means an additional cost for the user along with the initial investment.

Every new technology takes time to perfect and find its way. Few years ago, Interdent paved the way for the CC POWER, CC COSMO+, 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. 1).

This was the reason to make CC POWER, with its immense power of 2.4kW, available to the most demanding users, as it will be able to operate a 2.5-kW maintenance conductivity and precision, 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 that are milled dry (zirconium, CoCr, wax, composite).

All milling units offer a possibility to mill discs of size 8-12 mm and small blocks while CC CHIC is designed for dental clinics and therefore only mills small blocks.

Our development is focused on providing users with an excellent system that guarantees top quality and precision, is simple to use and protects users from additional costs due to licence fees. For this reason, we include in our sales program scanners from company Medit and software Exocad (Fig. 2).

Comprehensive CAD/CAM system also includes production of discs and mulls for CAD/CAM. These have been 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 website www.interdent.cc or contact us on e-mail info@interdent.cc.

We are looking for dealers in different countries.

Celtra® Press

Celtra® Press, the new pressable, zirconia-reinforced lithium silicate as well as its veneering porcelain Celtra Ceram and Celtra Press investment is available now.
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, Biodentine, Calcium Hydroxyde 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, apexification, 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!

By Promedica GmbH

Light-curing non-etch bonding system with nano-fillers
- Reinforced with nano-fillers
- Superior physical properties
- No postoperative sensitivities
- Ideal for the use in pediatric dentistry

Light-curing nano-ceram composite
- Nano-reinforced ceramic particles
- Special resin matrix
- Significantly less free monomers
- Highly esthetic
- Universal for all cavity classes
- Comfortable handling, easy modelling
- Also available as Composan LCM flow

Light-curing micro-hybrid composite
- Applicable for various indications and all cavity classes
- High translucency and a perfect color adaptation
- Polishable to a high gloss
- Excellent physical properties for durable fillings
- High filler content
- Packable consistency
(available as Composan LCM flow)
Cervitec F survey: Results point to a well-liked product

By Ivoclar Vivadent

SCHAAN, Liechtenstein: In a survey recently conducted by Ivoclar Vivadent on its new protective varnish, Cervitec F, respondents commented favourably on its aesthetics, range of applications, delivery form, fluoride and chlorhexidine concentrations, and taste. Overall, the dentists reported that the significant advantage of the combination product is that it saves time. The survey invited dental professionals to rate the properties of the varnish, which was launched in all European markets in September 2016 and is now available in Australia and New Zealand. "Their opinion is important to us," a representative of Ivoclar told Dental Tribune Online. A total of 279 dentists tested and commented on Cervitec F. According to Ivoclar, more than 80 per cent of the survey participants were generally satisfied or very satisfied 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 using 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 erupting teeth. Cervitec F differs owing to its innovative formulation, merging fluoride and chlorhexidine in one working step, the representative explained.