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YOUR DENT MAGAZINE BY KULZER

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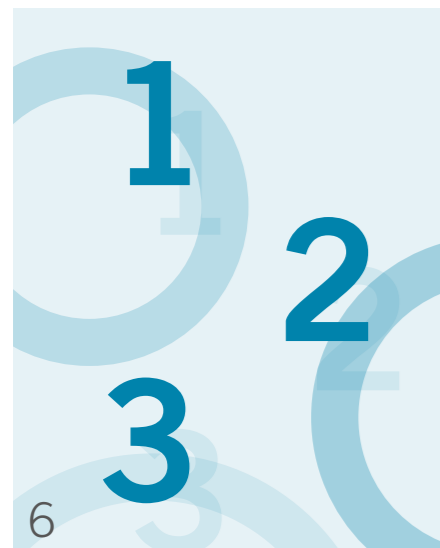
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STRONGER

TOGETHER





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DEAR CUSTOMERS

The pandemic continues to control our daily lives, routines and the way we work. We, as your global Kulzer team, want to thank you for your trust and loyalty during these – for all of us – challenging times. Please let me assure you: We are here for you without compromise!

Our local teams work tirelessly to support you in maintaining the oral health of your patients; as we know their oral health is integral to their overall health. Please reach out to us whenever we can assist you.

“ Together we will gain strength again and together we will overcome this crisis – because: We are better together.

In the current WE issue we want to give you insights into how your colleagues around the world cope with the challenges arising through COVID-19. Kulzer employees from Germany, USA and Brazil share their experiences in a personal interview.

Having yours and our employees' safety in mind Kulzer decided to not attend various trade shows – this includes the world's largest dental fair, the International Dental Show in Cologne, Germany. Since this decision we have been working on an alternative event format that would offer you added value while giving us control and flexibility – especially in view of the pandemic. The solution we are now developing for you, our customers, is the Kulzer Mobile Academy, a concept that combines training and trade fair, personal meetings and digital exchange – close to you. Get curious and first insights in the magazine.

We are all in this together. Together we are able to find solutions to stay connected, together we will gain strength again and together we will overcome this crisis – because: We are better together.

Take care and stay healthy,

Marc Berendes
CEO Kulzer

Write to us! Do you have any comments on this topic? We are always grateful for your suggestions – recommendations, questions, criticism – by e-mail:

we@kulzer-dental.com

AROUND THE WORLD

VIEWS AND THOUGHTS ON COVID-19

WE asked dentists and dental technicians all around the world – how did they experience COVID-19? What were their learnings? Here we want to share their views and thoughts!



Members of my "Think Adhesive Group" and I were forced to use communication systems, until then little exploited, such as call conferences, video calls, and webinars. We saw a great need for help, so we published an ebook called "Dentist and Covid-19: how to manage the dental practice in the post-emergency" and a series of educational hand-outs called "Think Adhesive Pills". This only goes to show how a highly critical situation can stimulate and trigger positive reaction mechanisms for the future!

Dr. Riccardo Becciani, Dentist in Impruneta, Italy



One challenge is developing a standard operating procedure based on the latest guidelines, which are always changing. The FFP3 mask proves to be an obstacle when trying to communicate with patients and definitely makes dentistry a lot more arduous!

Amisha Patel, Dentist in Manchester, UK



I was surprised at how poorly we were prepared for a pandemic at a national level, particularly materially (personal protective equipment etc.), although a pandemic was certainly anticipated. On a professional medical level, I was quite surprised to see that in many practices there was a great deal of insecurity and even panic. Potentially infectious aerosols have always been our daily reality, and we have learned to deal with them very well.

Dr. Dirk Vasel, Periodontist in Leinfelden-Echterdingen, Germany

I learned that mankind can adapt to any situation, and everything is a mind-set that the brain can adapt to. During the lockdown, I adapted to a lifestyle I never thought I would be capable of: staying home, spending time with the family, and giving myself a goal every day. I have had a very active professional life in the last few years with lots of travel. I even had seven professional trips planned to conferences and courses where I was speaking in the months of the lockdown. All of them got cancelled, and I ended up at home with the only place I could travel being my backyard.

Dr. Amir HadjHamou, Director of Elite Academy, Dubai, UAE



Since the outbreak of COVID-19, what struck me most was the great effort put forth by the Chinese government and the dental industry to contain the pandemic. I did not pay enough attention myself at first, and thought that, as a dentist, my routine protective measures should be sufficient to prevent any respiratory infectious disease. Later, the dental departments were voluntarily closed in order to cut off any possible transmission path of the COVID-19 virus, even though the government had not intervened in the opening of public hospitals.

Wenjia Wei, Phd. Head of dental Dept. of Shanghai Tongren Hospital, China



It has been a period that perhaps was not good for many of us, but on the other hand, it has been an opportunity to reflect, think, and re-prioritise our social, scientific, practical, and economic lives.

Mr. Kamal Jawabra, Dental technician, Saudi Arabia



In addition to being more aware of biosecurity and adopting new hygiene habits and social distancing, important topics that arose with the pandemic were prioritising mental health and being patient, particularly with the lack of control over the uncertain future in the short and long term.

Prof. Jansen Ozaki, Orthodontologist in Sao Paulo, Brazil



Some lessons I have learned: stay connected with others, keep working, and keep yourself busy. Learn something new (I took up photography). Take a daily walk in nature. Read articles and watch webinars. And finally, don't forget to enjoy a cup of tea or coffee with your family and keep hoping for a better world and future.

Mr. Elie Fares, Dental technician, Lebanon



WHAT DO YOU THINK?

Did you change already your behaviour or do you think things will get back to normal after a vaccine is found? Tell us under we@kulzer-dental.com!

FINANCIAL SECURITY AT LAST –

WHEN YOU FOLLOW TWO IMPORTANT BUSINESS MANAGEMENT RULES AND FIVE TIPS FOR PRACTICE MANAGEMENT



Position	Cost
Cost of materials and external services	10,000.00 €
Salary costs	20,000.00 €
Rent	5,000.00 €
Other fixed costs	5,000.00 €
Interest and redemption payments	2,000.00 €
Employer's salary	8,000.00 €
Total monthly regular payments	50,000.00 €

As the owner of a dental practice, you are familiar with the monthly continuous flow of payments and withdrawals from day-to-day business. First determine – as shown in the example – the costs for materials, personnel, rent, and other running costs of administration and maintenance. Also take into account payments for loans and interest as well as private withdrawals in sole proprietorships and partnerships as imputed entrepreneurial income. This sum of regular monthly payments, here 50,000 euros, should be the minimum amount available on the business bank account at the end of the month – after transfer of the total costs including wage and salary payments. This would pre-finance one month of daily business.

Solid financing prevents unpleasant surprises

Do you know the golden rule of financing? It requires the temporal correspondence between the raising of capital and its use as assets. Imagine your practice needs a new X-ray machine. It has a useful life of eight years. The loan you use to finance the purchase should run for the same period. The capital borrowed and the assets financed with it must therefore have the same maturity. The bottom line: calculate the financing to ensure sufficient liquidity. At the end of the day, you'll be better off if you base your business activities on these two basic economic rules described in this article, understanding liquidity and smart financing. In the second part of this article, you will learn five concrete, detailed tips that will effectively support you in this.



How are you doing so far in the pandemic? In my consultations, I have found that the companies and dental practices which are doing the best already had basic business management knowledge before the crisis, and implemented it accordingly.

Stay liquid – and finance smartly and calculably

In this article, I will explain two basic business management aspects for successful practice management: liquidity and financing. In addition, I will give you five concrete and proven practical tips that will lead you to more security, tailor-made management decisions, and better results.

Understanding liquidity ...

If companies and practices lack the money to meet payment obligations such as employee salaries, rents, and outstanding invoices on time, this considerably limits scope of action and leads to higher costs. If the inability to pay continues, insolvency is imminent. In addition, a lack of liquidity often leads to considerable psychological stress for the owners.

... and its possible consequences

Liquidity is defined as the ability to meet all payment obligations – when they are due. Even if scarce liquidity does not necessarily lead to insolvency, it does increase costs compared with a company that has sufficient capital at hand. Common consequences of liquidity problems include:

- expensive interest due to exceeding credit lines
- extortion by banks in loan negotiations and poor financing conditions
- financing cancellations and loss of innovative strength
- lost profits from unused discount drawing possibilities
- costs from reminder fees and late payment surcharges due to late payment
- loss of reputation and poorer conditions with suppliers because payments are transferred too late
- loss of reputation among employees due to late salary payments and limited room for manoeuvring when deciding on salary increases

The top priority should always be ensuring sufficient and appropriate liquidity. But how much short-term liquidity is advisable? Let's take a look at the following simplified figures, which are intended as a guideline for "good times" with a normal economic cycle:

HANS-GERD HEBINCK

Business consultant from Soest, Germany, helps dental laboratories and practices to improve their performance and profitability, e.g. through communication and team training.

hebinck-unternehmensberater.de



TIPS ON LIQUIDITY AND FINANCING – DIRECTLY FROM THE PRACTICE

1

1: Observe alarm signals

Do you regularly have to overdraft your account at the end of the month after paying your salaries? Then this is a clear sign that action is needed. Speak with your tax advisor or business consultant and consider together with them which measures you can take to generate a higher cash flow in the future to improve your liquidity.

2

2: Correctly evaluate possibilities for increasing reserves

In “good times”, the most important measure to improve liquidity is to increase sales. But what do companies do in a crisis, such as the one we are currently experiencing, when the liquidity reserve needs to be increased in the short term in order to be prepared for a possible second lockdown? The obvious measures include cost reductions or negotiations with banking partners. However, cost reductions are unsuitable in temporary crises. Firstly, because the effects are only felt in the medium term. Secondly, because demand from patients rises quickly after the crisis at health service providers – and staff are needed just as quickly again.

3

3: Activate hidden reserves

Do you save old gold, dross, and filings over long periods of time before you hand it over for processing? Then you are behaving like many other companies and practices. The redemption of scrap gold is a simple way to convert hidden reserves into cash. These hidden reserves can be realised immediately and easily in times of crisis, especially since precious metal prices are currently very high.

4

4: Recognise and utilise leeway

Conversely, some businesses have rather ample liquidity reserves in the form of large bank deposits. In such cases, there is a risk of a loss of profitability, e.g. due to a lack of interest or inflation. However, the effect of the low return on uninvested funds can be neglected at present – if one takes into account the low interest rate phase which is likely to continue for a long time.

In the case of large bank balances, however, consideration should be given to distributing these balances over accounts at several banks. The possible advantages: it may be possible to avoid or reduce negative interest rates and increase deposit insurance in the event of a banking crisis. If you have large bank balances, ask your house banks what deposit protection they currently guarantee.

5: Choose financing formats that are easy to calculate

Do you know the difference between bullet loans and annuity loans? The annuity loan is the safe option: with financing calculated on the basis of the term. Here, the financing lasts as long as the actual use.

In contrast, with bullet loans, the loan is not repaid over the term. Instead, an investment fund or a life insurance policy is saved at the same time – with the aim of having saved enough capital at the end of the term so that the loan can be repaid in one amount. Bankers or financial service providers usually promise that a considerable amount of capital will be saved in addition to the amount of the loan for retirement. That sounds good at first.

But what if, for example, far too long repayment terms were chosen for practice start-up loans, and at the same time, the financial products for the savings do not yield the planned (and necessary) return? This often happens, with the consequence of financing gaps that have to be covered at an advanced age. A further disadvantage is the fees that are charged twice: as interest on the loan over the entire term, as well as for high commissions and/or expenditure premiums for the savings product. So always separate financing from investment transactions and avoid bullet loans – even if they are sold to you as a tax-saving model.

5



CONCLUSION

A good businessperson in a small or medium-sized company finances investments smartly and calculably, thereby ensuring sufficient liquidity in their dental practice. In good and less good times, it's important to remain as independent of banks as possible, and you will be able to withstand even harder crises.

WHAT EXPERIENCES DID YOU MAKE DURING CORONA-TIME?

Share your views to the economic impact in your country under

we@kulzer-dental.com

IOS MEETS COVID-19

REDUCING RISK OF CROSS-CONTAMINATION

Intraoral scanners are gaining ground. The technology is refined and offers an effective replacement for conventional tray impressions in a variety of indications. Also, in view of the rampant coronavirus pandemic, digital impressions can contribute to an effective hygiene concept in the dental practice.

We interviewed two experts from Kulzer about the advantages of intraoral scanners.



DR. NATALIE NÖLLER

Dentist



URSULA SCHÄFER

Senior Product Manager



What are the advantages of an intraoral scanner during a pandemic?

Dr. Natalie Nöller: There are shorter, and fewer contact points due to digital data acquisition and transmission. When considering all the measures that are needed for taking conventional impressions – such as preparation of the tray, model making, tray cleaning and disinfection, demoulding and trimming of the model – then digital impression taking is significantly faster (cf. das dental labor, 07.2020).

In general, with the digital workflow patients also have to be called in less frequently and the treatment time is shorter overall.

Furthermore, the exchange of impressions between practice and laboratory is no longer necessary, which reduces the risk of cross-contamination.

Plus, intraoral scans have less direct contact with saliva and blood, which reduces the risk of infection among practice staff – even when there isn't a pandemic.

Are there other benefits with regards to COVID-19?

Dr. Natalie Nöller: If the tray impression is not thoroughly cleaned and disinfected, the viruses can reach the laboratory via the impression. If the laboratory works with several dentists, the chain of infection can quickly become very long. With the intraoral scanner, cleaning and disinfection are limited to the device and the removable scanner tips, which are autoclavable. Cleaning and disinfection of the impression is no longer necessary, because the transmission to the laboratory is completely digital.

Patient saliva and/or blood, droplets, and aerosols containing SARS-CoV-2 viruses can contaminate dental impressions. If not adequately disinfected, the contamination can be transferred to the plaster models (Papi P, Di Murro B *et al.*, 2020).

Ursula Schäfer: Depending on the scanner model or the associated software, there are also other advantages. An interesting function is, for example, Case Talk. This allows the patient to be sent home directly after the scan. The patient calls up the scan on his home PC or tablet via a secure link. The dentist then discusses treatment options and costs with the patient, and visualises the current situation – all from a safe distance, e.g. over the phone.

Cooperation with the dental master laboratory is also easier. Dentist and laboratory can discuss the patients' cases unerringly and at a distance, and always remain in digital exchange even during ongoing work.

Dr. Natalie Nöller: In this context, another advantage of an intraoral scan comes into play. In contrast to a conventional impression, which is a negative impression, the intraoral scan or its software generates a positive impression. This makes it easier for the patient to understand the oral situation, recognise possible problem areas, and be more open to treatment.

Is the 3D data not too large to send?

Ursula Schäfer: On the contrary – for example with our intraoral scanner cara i500 – the file size for a full arch scan in high resolution is 40 to 60 MB. This comparatively small file size also makes intraoral scans interesting for archiving purposes, i.e. since they are part of dental documentation and must usually be kept for 10 years.

Dr. Natalie Nöller: This can reduce the storage space in the practice, which is taken up by physical models, which have to be archived. In addition, the low storage space requirement opens up further possibilities, for example patient monitoring. An annual full jaw scan can be compared with previous years to better detect changes. The scan data can also be used in the event of accidents involving tooth damage or loss, in order to be able to reproduce the dentition in detail.

How does an intraoral scanner facilitate the dentist's daily routine?

Dr. Natalie Nöller: In my opinion, the main advantage for the dentist is saving time while getting the high advantages. No time-consuming preparation and final cleaning of the impression trays is necessary. Instead, scanning times are short and the digital impression can be directly dispatched to the laboratory. In addition, failed impressions do not have to be repeated in a time-consuming and material-intensive manner. Insufficiently impressed areas can be rescanned without difficulty. The good visualization makes it easier to explain the clinical situation and the planned treatment to the patient.

Ursula Schäfer: The scanner and software optimise the workflow in the practice by automating previously manual work steps. For example, the Smart Scan Filtering function automatically removes unneeded areas – such as soft tissue – during the scanning process. An intraoral scanner also supports patient communication. The 3D images are a helpful tool for explaining a patient's need for treatment, pathological findings, and for advising them.

Are there indications that I cannot cover with an intraoral scanner?

Dr. Natalie Nöller: For an implant-supported full jaw restoration or edentulous jaws, a conventional impression is still necessary. A conventional functional impression also proves to be more advantageous for the fabrication of digital total prostheses, as the movable mucosa areas cannot be scanned correctly, and functional aspects are not taken into account. In general, the intraoral scanner is specialised for smaller works.

Ursula Schäfer: The manufacturers are continuously developing their systems. A large part of the further development is taking place on the software level, while the hardware or handpiece remains unchanged. This gives the dentist the security to profit from their investment for as long as possible.

In spite of the many advantages, the acquisition costs still deter some dentists.

Ursula Schäfer: There is already a large selection of scanners in a wide range of price categories – everyone can find a suitable model that meets their own requirements in terms of price and performance. But don't just look at the price! When buying a scanner, you should always consider the included services, for example free software updates and the free export of all data files.

Dr. Natalie Nöller: In addition, you save money in other ways. You no longer need to buy and stock impression material, or only very little. Plus, model archiving can be done digitally, you produce significantly less waste, and you save on working time needed, for example, for cleaning the impression trays.

There is a separate fee item for the digital scan. This can easily be integrated into the cost plan.

To what extent do patients benefit from intraoral scanning?

Dr. Natalie Nöller: The intraoral scan represents a significant advance, particularly for anxiety or strangulation patients. But all other patients will also appreciate the spoon-free impression and the increased comfort of treatment.

Ursula Schäfer: In this respect, the purchase of an intraoral scanner is also suitable for practice marketing. You can draw attention to yourself as a modern practice that is particularly concerned about the well-being of your patients. You will also become more attractive as an employer. Long term, there is probably no way around the intraoral scanner, as many universities now teach the theory and practice of digital dentistry.

“ The intraoral scan represents a significant advance, especially for anxiety or strangulation patients.

What should interested parties look for when buying an intraoral scanner?

Ursula Schäfer: Apart from carefully comparing the technical data, such as the scanning accuracy, there are some general recommendations. Avoid proprietary systems. Many scanners can be operated with commercially available PCs or notebooks. This facilitates replacement in the event of a defect. Furthermore, flexible systems are easier to upgrade. You should also keep an eye on the follow-up costs. Are software updates free of charge? Which services are covered by the flat-rate service package? Is there any support available for this product?

Dr. Natalie Nöller: The scanner tips should also be autoclavable, and all surfaces should be easy to wipe down and disinfect. I do not recommend a blind purchase. For this reason, we generally recommend a test set-up before purchase, so that the entire practice team can test and learn how to use the scanner under expert guidance in one day. The data formats generated by the software should also be considered. Common data should be generated so that many laboratories can continue to work with it.

“ The scanner and software optimise the workflow in practice by automating previously manual work steps.



kulzer.com/we-cara-i500

WOULD YOU LIKE TO LEARN MORE ABOUT INTRAORAL SCANNERS OR WOULD YOU LIKE AN INDIVIDUAL CONSULTATION?

Please contact us at:
e-mail: cara-service@kulzer-dental.com
 We look forward to your message!

TRAINING 2.0

WEBINARS DURING COVID-19 CRISIS

Dentists cannot do their work from home. Still, many lockdowns in countries put dentists in the situation that they were not allowed to treat patients, or that patients only went to the dentist in the case of emergency.

What to do with the extra free-time? Where to get new information, stay up-to-date, or improve your knowledge in dental fields? Workshops or in-person clinical education were no longer possible. That's when another new normal stepped in: webinars.

At Kulzer, we adapted to the new situation as well, and have been providing more webinars for our customers. Thanks to many years of innovation in all dentistry fields, and good contact to experts in the dental world, we were able to organise various webinars on diverse subjects. We also trained our own staff, providing training to 1,052 people in 62 webinars!

Here are some details about our customer webinars from March to September 2020:



Countries:

Belarus, Benelux, Brazil, France, Germany, India, Italy, Kazakhstan, Mexico, Middle East, Poland, Russia, Spain, USA



Topics/Purpose:

Restoration	32.1 %	Digital	5.7 %
Impression	18.9 %	Signum	5.7 %
Bonding	11.3 %	Ceramics	3.8 %
Teeth	7.5 %	Scrap	3.8 %
Prosthetics	5.7 %	Others	5.7 %



Example of a webinar

Webinar with the most participants:

Indirect Mock-up,
 Speaker
 Dr. Amir Hajdhamou,
 6,100 participants

Webinars held:
 66

Participants:

31,363



YOU WANT TO JOIN ONE OF OUR WEBINARS?



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JUST ONE VISIT TO THE DENTIST

REDUCING COVID-19 INFECTION RISK FOR PATIENT AND PRACTICE STAFF

The COVID-19 pandemic ushered in new changes to dental practices. They need to prioritise keeping infection risk as low as possible for patients and staff. At the same time, a sufficient cash flow is needed to recover financially, and keep a practice running. But what does that mean for dentists, their business, and their patients?

Despite precautions, COVID-19 risk groups or patients in general are keen to avoid too many visits to the practice. Also, for the safety of the staff, fewer visits by a patient lowers the exposure risk. Because of the economic crisis, it is likely that more patients will increasingly focus on saving money in the foreseeable future.



DR. MED. DENT.
JANINE SCHWEPPE

Senior Global
Scientific Affairs Manager

“ New matrix chemistries like TCD and optimised filler systems have extended the indications of direct composite restoratives.

So how can dentists react appropriately to this shift in patients' needs without compromising quality? In light of a mutual interest, it can be beneficial to replace prosthetic works with direct fillings. Of course, the tooth should have sufficient residual stability for a filling therapy.

Advantages include:

- Reduce the exposure for infection, because only one appointment is needed.
- Patients will welcome a solution which allows them to save money.
- Direct restorations as well as intraoral repairs of restorations preserve more tooth structure than indirect restorations.

In the past, only small and mid-sized cavities were considered an indication for direct composite restorations. This limited the application of direct composites in stress-bearing posterior areas to the reconstruction of single cusps. But are these recommendations still valid in light of the tremendous developments of resin composite materials in recent years?

Dental practitioners increasingly use direct adhesive composite restorations in heavily restored anterior and posterior teeth. Additionally, recent research and development has improved physical properties and introduced composite materials containing nanoparticles, which have increased the existing range of possibilities for direct composite resins.

Kulzer's universal nanohybrid composites Venus Diamond and Venus Pearl were developed to minimise the primary causes of restoration failures, i.e. fractures and secondary caries with restorations in the posterior area¹.

Instead of the conventional Bis-GMA chemistry, Kulzer's TCD-urethane crosslinkers are used in both materials. This special monomer has a high

reactivity that leads to a strong and dense network. Together with an optimised filler system, the mechanical resistance to masticatory forces is increased. This special crosslinker has a further effect: its high packing density prior polymerisation leads to a lower shrinkage. This effect accompanied by a high elasticity of the monomer reduces shrinkage stress, which is one of the preconditions for a good, long-term marginal quality.

These properties were already confirmed by various studies within the last decade.

The shade concept of both composites is based on three levels of translucency. It is suitable for all kinds of restorations, ranging from simple mono-shade fillings up to multi-shade restorations for high aesthetic situations.

The difference between Venus Pearl and Venus Diamond is the filler system. Pre-polymerised fillers are added to Venus Pearl. This leads to a creamy consistency in handling with Venus Pearl whereas Venus Diamond is a rather firm composite. The dentists can choose the composite according to their handling preferences.

To complete the shade range of both composites, in 2020 Kulzer has introduced the additional ONE shade. This shade has an adaptive light matching effect. Consequently, for basic restorations mainly in the posterior area, ONE adapts to the colour of the surrounding tooth. The practitioner does not need to select a shade anymore as ONE can match any tooth shade.

COVID-19 has definitely changed our way of thinking and behaving. With the right materials like Venus Diamond and Venus Pearl and its new option in ONE shading, dentists can meet patients' needs easily and efficiently and still keep up restoration quality and aesthetics.

¹ Demarco FF *et al.*: Longevity of posterior composite restorations: Not only a matter of materials. Dental Materials 28 (2012):87-101.

TRY IT OUT FOR YOURSELF:
[kulzer.com/try-one](https://www.kulzer.com/try-one)



Find the filling –
it's time for a short quiz!
[kulzer.com/we-one-quiz](https://www.kulzer.com/we-one-quiz)

The following cases will depict the suitability of Venus Diamond and Venus Pearl for the restoration of extended cavities as an alternative to indirect restorations. Furthermore, a clinical example of the Venus Diamond/Venus Pearl ONE shade is given:

Case 1:

Direct anterior Venus Diamond restorations instead of veneers or crowns

by Dr. Sanjay Sethi, Squaremile Dental Centre, London, UK

A male patient presented with two incongruous restorations in teeth 11 and 21. The complete incisal edges and the labial surfaces were replaced by composite. Discolouration, marginal insufficiency, fractures, and severe wear were detectable. From the clinical perspective, the degree of lost tooth structure indicated indirect restorations for both teeth. The patient, a dentist himself, nevertheless asked for direct composite restorations. Due to its excellent physical properties, the nano-hybrid composite Venus Diamond was chosen.



1 Pre-operative smile view. Patient requested only direct composite restorations. Due to the extent of the cavities, the patient was informed that indirect restorations such as crowns would be more appropriate.



2 Pre-operative view of the upper teeth to assess the aesthetic situation. Both upper central incisors vital and had no signs of root problems on radiographic examination.



3 Using the pre-selected shade of Venus Diamond (in this case A2), a direct intra oral mock-up was made without the use of bonding. The palatal form and the occlusion were adjusted. The aesthetic parameters of the mock-up should be assessed at this stage. After finalising the mock-up, a silicone putty index can be made chair side.



4 Index in situ, prior to being trimmed.



5 The composites were removed, and a very fine facial reduction was performed on teeth 11 and 21.



6 The index guides the first layer of Venus Diamond Incisal CL (clear) to form the palatal wall. Metal matrix strips were used to separate the teeth, to prevent the restorations from being splinted together. Tooth 21 also had a thin layer of Opaque Medium Dentine applied, Venus Diamond OM, to reinforce the weak palatal shell of composite.



7 Venus Diamond OM was used to replicate the mamelon anatomy and mask the tooth and composite interface. Then, Venus Diamond Universal A2 was applied. Finally, a thin layer of Venus Diamond Incisal CL was applied to the facial surface, to add depth to the restoration.



8 Final restoration. View of the patient's smile illustrates balance of form and harmony



9 Perfect results even after 19 months of use without polishing.

Case 2:

Direct posterior restorations of Venus Diamond instead of inlays, (partial) crowns

by Dr. Sanjay Sethi, Squaremile Dental Centre, London, UK

Amalgam fillings of teeth 24, 25, 26 and 27 had to be replaced due to underlying caries. Teeth 26 and 27 were both planned to have core fillings and later crowns due to the extent of the cavities after excavation.

Before any indirect cuspal coverage restorations, it needs to be ensured whether the pulpal status is still fine. For this reason, Venus Diamond direct composite restorations (except tooth 26) were placed.



1 Pre-operative view of the upper left quadrant. The amalgam fillings were replaced due to underlying caries. Teeth 26 and 27 were both planned to have core fillings and later be finalised with crowns due to extent of the cavities.



2 Post-operative view of the upper left quadrant restored with Venus Diamond direct composite restorations (except tooth 26). Teeth 24 and 25 had the definitive restorations whereas teeth 26 and 27 were due to have crowns placed at a future date.

This example shows an alternative treatment strategy for the COVID-19 times. Extended direct fillings can be placed as a long-term provisional to postpone indirect restorations

Case 3:

The ONE shade effect in a basic posterior restoration

by Prof. Dr. Nicola Scotti, University of Turin, Italy



1 59-year-old male patient presenting a secondary caries on the amalgam restoration of tooth 26.



2 After rubber dam application, the cavity was excavated and prepared.



3 The cavity was bonded using iBOND Universal after a selective enamel etching. Venus Diamond ONE Shade was used to restore the proximal wall. After light curing, the dentine was covered by a 0.5mm thick Venus Diamond Flow layer.



4 The restoration was layered in an oblique layering technique using Venus Diamond ONE Shade.



5 Fissures were characterised by a brown staining resin.



6 Final Venus Diamond ONE Shade restoration after finishing and polishing. The entire treatment time was 24 minutes. Venus Diamond ONE Shade allows efficient and aesthetic basic restorations.

SOMEWHAT DIFFERENT

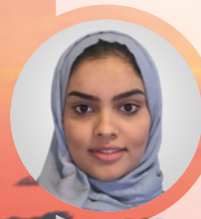
THE 11TH IADR/KULZER TRAVEL AWARD

After having prevailed with their research works on new testing methods of dental materials in the competition, five young scientists received their well-earned sponsorship despite the corona pandemic somewhat differently than usual.



As the IADR General Session & Exhibition in Washington, D.C. (USA) was cancelled this year due to the pandemic, the young researchers could not be honoured as usual for their research work at the world's largest congress in dental science. Nevertheless, Kulzer is maintaining the award and the associated financial support for the young scientists. The local Kulzer organizations granted the award to the winners in their respective countries.

This year the following winners were awarded for their work by the independent Scientific Committee of the IADR Dental Materials Group:



Arwa Daghreery from the University of Michigan (United States) for her work on "Melt Electrowritten Fluorinated-CaP Coated Poly(ε-caprolactone) Three-Dimensional Scaffolds for Periodontal Regeneration"



Valentin Herber from the Medical University of Graz (Austria) for his study "Effects Of Magnesium Implants On Bone Healing: A Preclinical Study"



Kimberly Ngai from the University of Toronto (Canada) for researching on "Dental Adhesives Containing Drug-silica-particles Reduce Secondary Caries Development"



Mohammed Zahedul Nizami from the Okayama University (Japan) for his project "Functionalized Graphene Oxide Nanocomposites Protect Decalcification of Hydroxyapatite and Dentin"



Iris Yin from the University of Hong Kong (China) for her work on "Synthesis and characterization of fluoridated silver nanoparticles and its potential as a non-staining anti-caries agent".

"The topics of their work show the awardees' excellence and potential – they make an important contribution to dentistry. Even though we were not able to honour them at the congress this year as usual, it is important for us to acknowledge their outstanding work and we are therefore maintaining our support also in these difficult times in order to promote the scientific projects of the young researchers", says Kulzer CEO Marc Berendes. He is delighted about the increasing recognition of the award that Kulzer established in 2010 to support and encourage young scientists to research on new testing methods for dental materials.

The prize money of the award, which is normally used by the scientists to finance the trip to the dental congress, can now be used for their research projects, or for participation in next year's IADR General Session & Exhibition taking place in Boston, Mass. (USA), July 21 – 24. In 2021 Kulzer will again present the IADR/Kulzer Travel Award, to which interested young scientists can apply since 17 August 2020.

YOU ARE INTERESTED IN TAKING PART AT THE IADR TRAVEL AWARD?



Here you will find more details on the award and the application procedure as well as information on the selection process: www.kulzer.com/we-iadr



UPSKILLING WITH THE KULZER MOBILE ACADEMY

TRADE SHOW FEELING DESPITE COVID-19



STEFAN KLOMANN
Chief Marketing Officer

How can knowledge transfer and new products, personal exchange and digital dialogue formats be combined? We have developed a solution for our customers and partners which, despite COVID-19, offers a certain trade show feeling: The Kulzer Mobile Academy.

"After our decision not to take part in the coming IDS, we worked on finding an alternative event format that would offer our customers real added value while giving us control and flexibility – especially in view of the pandemic," says Stefan Kломann, Chief Marketing Officer at Kulzer. The Mobile Academy, with which Kulzer will be touring the world from 1 March 2021, is a new training concept and is entirely dedicated to further training: customers are invited to expand their knowledge and skills with Kulzer training courses and at the same time get to know new Kulzer products.

Customers do not need to go on an extensive journey – the Mobile Academy brings the most important information about the fair directly to their doorstep in a trailer. The Hanau-based dental company is heading to more than 200 locations in Germany, neighbouring European countries and the USA with the Mobile Academy Pavilion, whilst observing the local Covid 19 guidelines.

The Mobile Academy will start on 1 March 2021 at the Kulzer headquarters in Hanau, accompanied by reports in the social media, such as live streams of the lectures. There will also be online services throughout the entire truck tour, so that the dental experts will be able to participate virtually in the tour or in individual lectures and training sessions.

“ With this concept, we want to offer our customers a way to enjoy a relaxed event close to their place of work during this extraordinary time without the long journey, the hustle and bustle of the trade fair and the associated uncertainties.

FOLLOW US ON FACEBOOK OR INSTAGRAM

and stay up-to-date when we announce our tour plan for the Kulzer Mobile Academy!

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