



In this very first edition of our OREC-Panorama we want to introduce to you our concept of providing continued updates from different areas of dental practice as regular occurring newsletter. In the first category we want to present to you a selection of the latest scientific news

published in the highest ranked dental journals that are related to the four fields of interest on our platform: implantology, periodontology, orthodontics and endodontology. In every edition we will focus on two topics with a slightly pronounced focus on implantology.

New developments in dental products and devices will be collected in a second section NEWS FROM INDUSTRY and another section MISCELLEA-

NOUS is dedicated to all other events that might be of interest for dental practice. Last but not least we will assemble the most important events worldwide to „SAVE THE DATE“ with a slight focus on Europe. Once per year a special edition will deal with a thorough analysis of one „hot“ topic, representing compre-

hensive material in cooperation with our master students working on systematic reviews.

While this edition will occur as complete document ready to download next editions will be prepared to be read online with direct access to embedded links.

Prof. Dr. Joos (Editor)



## LATEST NEWS FROM DENTAL SCIENCE

### Implantology & Oral Surgery



Implant therapy is nowadays an established method to replace missing teeth. However, peri-implant mucositis or peri-implantitis represent increasing challenges in particular for implants set more

and more into challenging positions or in patients with diverse risks. In this section the main findings of 4 recently published articles closely related to this topic are summarized dealing with analysis of biofilm development on different abutment surfaces (1), the success of different decontamination methods (2), the analysis of the properties of failing implants (3) up to analysis of the risk for recurrence after surgical therapy (4).

**(1) Zeller, Barbara, et al. Biofilm formation on metal alloys, zirconia and polyetherketoneketone as implant materials in vivo. Clinical Oral Implants Research, 2020, 31(11), p 1078-108**

Biofilm formation was studied in situ on 5 different abutment materials. The applied intraoral splints were designed with a 2–3 mm gap allowing saliva flow between the palatal mucosa and the test specimens. Five different commercially available materials for implant or abutment components were investigated: a standard titanium zirconium alloy (TiZr) processed for the machined transmucosal compartment of tissue level implants (Roxid<sup>®</sup>, Institute Straumann AG); a gold-based high noble metal alloy Esteticor Lumina PF<sup>®</sup> (EL), Cendres+Métaux SA); a silver-based noble metal alloy Pagalinor<sup>®</sup> (PA), Cendres+Métaux); zirconia (ZR) fabricated from DD Bio ZX2 milling blanks (Dental Direkt GmbH); and the high-performance polymer Pekkton<sup>®</sup> ivory (PEKK; Cendres+Métaux). Except for the noble

alloys all materials were grinded and resulting Ra values represented smooth surfaces. However the different surfaces types were not directly comparable (ranging from 0.085 - 0.235  $\mu\text{m}$ ) Wetting behaviour revealed intermediate hydrophobic properties for all samples types with contact angles for water: 70.0 - 90.6°. After 24 h of wearing in the oral cavity less biofilm mass and lower CFU counts were found on PA and EL, while ZR and PEKK developed similar levels as the reference material TiZr alloy. Compared with PA, biofilm mass was 1.5 times higher for EL ( $p = .004$ ), 1.7 times higher for PEKK ( $p < .001$ ), 2.2 times higher for TiZr ( $p < .001$ ) and 2.4 times higher for ZR ( $p < .001$ ). The culturing method confirmed these results for EL and PA with lower CFU compared to TiZr. In conclusion, silver-based noble alloy and gold-based high noble alloy demonstrated the least biofilm formation indicating a potential clinical use for components in the transmucosal compartment. Zirconia and Polyetherketoneketone revealed similar results as the reference material titanium zirconium alloy.

**(2) Pranno, Nicola, et al. Comparison of the effects of air-powder abrasion, chemical decontamination, or their combination in open-flap surface decontamination of implants failed for peri-implantitis: an ex vivo study. Clinical Oral Investigations, 2020, p. 1-10. <https://doi.org/10.1007/s00784-020-03578-w>**

The cited study focused on the comparison of different kinds of decontamination, namely mechanical (air-powder abrasion), chemical (with hydrogen peroxide and chlorhexidine gluconate) or a combination of both methods ex vivo. Of note, these decontamination procedures were performed on real implants for mature biofilms developed under typical conditions. The study was conducted as a single-blind, randomized, controlled, ex vivo examination with intra-subject control, including 20 patients with hopeless implants in function for more than 12 months.

A statistically significant difference ( $p < 0.001$ ) in the concentrations of CFU/ml was identified only between implants treated with mechanical debridement ( $531.58 \pm 372.07$ ) or combined mechanical-chemical decontamination ( $954.05 \pm 2219.31$ ) and implants untreated ( $37,800.00 \pm 46,837.05$ ) or treated with chemical decontamination alone ( $29,650.00 \pm 42,596.20$ ). No beneficial effect was found for chemical decontamination in addition to mechanical decontamination. Overall, microbiological analyses identified 21 microbial species, with no significant differences between control and treatment groups, demonstrating that the removal of bacterial biofilm from the infected implant surfaces is quantitative and not qualitative.

In this study the effects of proposed procedures could be evaluated first time for treatment of human patients. This is a great advantage as results in animal studies might differ due to the difference in anatomical characteristics and physiological systems between the two species.

**(3) Tong, Z. et al. Changes of the surface topography and element proportion of clinically failed SLA implants after in vitro debridement by different methods. *Clinical Oral Implants Research*. (2020), <https://doi.org/10.1111/clr.13697>**

In contrast, the objective of this third study was focused on the evaluation of the surface topography and changes of surface chemistry of clinically failed implants after different in vitro debridement techniques. Thirty clinical failed implants were treated as following: G1: physiologic saline irrigation; G2: glycine powder air polishing; G3: glycine powder air polishing + ethylenediaminetetraacetic acid (EDTA); G4: Polyetheretherketone (PEEK) tipultrasonic scaling; G5: PEEK tip ultrasonic scaling + EDTA. Outcome parameters of interest were the relative contaminated area reduction (RCAR), Visual Analogue Scale (VAS, the higher value means the better cleaning effect) and surface roughness. G4 and G5 showed higher RCARs (82.90%, 82.89%), VAS scores (2.61, 2.33) and roughness reductions ( $-0.85 \mu\text{m}$ ,  $-1.80 \mu\text{m}$ ). G3 attained the highest decrease of Car-

bon ( $-26.67\%$ ), Oxygen ( $-13.71\%$ ) and Nitrogen ( $-5.66\%$ ), and the highest increase of Titanium ( $49.67\%$ ). PEEK remnants were detected on the implant surface of G4 and 5. In conclusion, PEEK tip ultrasonic scaling was more effective in eliminating visible contamination, while glycine powder air polishing combined with EDTA treatment was more conducive to expose the original surface element distribution. None of the presented techniques was suited to reconstruct the surface as the pristine implant.

**(4) Carcuac, O. et al. Risk for recurrence of disease following surgical therapy of peri-implantitis - A prospective longitudinal study. *Clinical Oral Implants Research* 31.11 (2020): 1072-1077, <https://doi.org/10.1111/clr.13653>**

In this study 73 patients wearing a total of 130 implants were examined up to 5 years after surgical treatment primary focusing on recurrence/progression of disease defined as any of the following events: (a) bone loss  $> 1.0 \text{ mm}$ , (b) surgical retreatment, (c) implant removal/ loss. 57 implants (44%) displayed recurrence/ progression of peri-implantitis during follow-up.

Three factors were identified as main factors associated with recurrence of the disease after 1 year of follow-up: 1.) Residual deep probing pocket depth (OR: 7.4; 95%CI: 2.8–19.3), 2.) reduced marginal bone level (OR 1.4; 95%CI: 1.1–1.7) and 3.) in particular implants with modified surfaces were at higher risk than implants with non-modified surfaces (OR 5.1; 95%CI: 1.6–16.5).

The strongest risk factor was residual PPD  $\geq 6 \text{ mm}$  after treatment. As well, the risk analysis revealed an increase in the odds for disease recurrence by 36% for every millimeter of reduced marginal bone level. Unfortunately, the exact impact of implant modification could not be specified as the study included a variety of different implant surface modifications (100 of 130 implants were modified!). Another limitation was based on potentially different supportive therapy during follow-up as recommendations were made on an individual basis.

## Periodontology



Not surprisingly, also in our review on scientific news in periodontology, diverse bacterial species play a role, the first article addressing the potential differentiation between chronic or aggressive PA (1).

Further, the extent to which PA treatment can promote further bacterial invasion was investigated (2). More in detail was analyzed in vitro and in vivo how the pathogens of *P. gingivalis* might be involved in triggering cardiovascular diseases (3). Last but not least one study dealt with potentially efficient methods to treat persistent pockets during periodontal maintenance therapy (4).

**(1) Montenegro, S. C. L. et al. Do patients with aggressive and chronic periodontitis exhibit specific differences in the subgingival microbial composition? A systematic review. *Journal of Periodontology* (2020).**

In 2018, the American Academy of Periodontology and European Federation of Periodontology published the official proceedings of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases containing a new classification. One of the most important changes was the decision not further to differentiate between chronic (CP) or aggressive (AgP) periodon-

titis but to group this disease under one single category. The main rationale was the lack of specific patterns of immune-inflammatory response or microbial profiles associated with CP or AgP. A wide range of studies had been published before to investigate specific differences between AgP and CP. Although a few reviews already focused on cytokine profiles for patients with AgP and CP or on presence of periodontal pathogens none of them had compiled the results of studies comparing the microbiota of these two clinical conditions, casting doubts on whether CP and AgP would be associated with specific microbial profiles. Therefore, a total of 488 articles were identified and 56 were included in this actual review. Thirteen studies found *Aggregatibacter actinomycetemcomitans* elevated in AgP in comparison with CP, while *Fusobacterium nucleatum*, *Parvimonas micra*, and *Campylobacter rectus* were elevated in AgP in a few studies. None of these species were elevated in CP. However, the number of studies not showing statistically significant differences between CP and AgP was always higher than that of studies showing differences. In conclusion these results suggested indeed an association of *A. actinomycetemcomitans* with AgP, but neither this species nor the other species studied to date were unique to or could differentiate between CP and AgP.

**(2) Stähli, Alexandra, et al. Effect of scaling on the invasion of oral microorganisms into dentinal tubules including the response of pulpal cells—an in vitro study. *Clinical Oral Investigations* (2020): 1-9.**

Mechanical treatment such as the scaling and root planning (SRP) became a standard treatment in periodontal disease therapy. However, repeated or extensive procedures might alter the surface of the root cementum and could exert impact on the pulpal tissue. Therefore, root canals of 102 extracted human teeth underwent shaping and cleaning. Half of the total number of investigated teeth were subjected to SRP and all teeth were exposed to either *Streptococcus gordonii* and *Actinomyces oris* or *S. gordonii* and *Porphyromonas gingivalis* for 10 weeks. The bacterial invasion was assessed in a depth of 1 mm to the root surface. In addition, the secretion of pro-inflammatory cytokine IL-8 and IL-2 matrix metalloproteinases (MMPs) by human pulpal cells was investigated after seeding the cells.

Bacterial invasion was always more intense on treated teeth 66.6% versus 44.4% when exposed to *A. oris/S. gordonii*, and 50% versus 25% when exposed to *P. gingivalis/S. gordonii* ( $p = 0.043$ ). Scaling had no impact on IL-8 and MMP-3 expression in pulpal cells. *P. gingivalis/S. gordonii* caused higher levels of IL-8, MCP-1, and MMP-3 than *A. oris/S. gordonii* ( $p = 0.003$ ,  $p = 0.011$ ,  $p = 0.037$ ). In conclusion, dentists should be aware that the root surface debridement with hand instruments might facilitate bacterial penetration. It was recommended to continue such investigations with other treatment modalities.

**(3) Farrugia, C. et al. Porphyromonas gingivalis Outer Membrane Vesicles Increase Vascular Permeability. Journal of dental research (2020): 0022034520943187.**

Periodontitis is increasingly associated with increased risk of cardiovascular and other systemic diseases. Nonetheless, the biological mechanisms are still unknown. There was already some evidence that the anaerobic *Porphyromonas gingivalis*, can enter the bloodstream through inflamed and ulcerated periodontal tissue. Loss of tissue integrity and increased bleeding facilitated movement of bacteria from the periodontal pocket into the bloodstream as well as disease-free femoral and coronary arteries. *P. gingivalis* harbors several virulence factors.

The outer membrane vesicles (OMVs) produced by *P. gingivalis* have been shown to play a role in periodontitis, although, to date, little is known about their interaction with the vasculature.

In the cited study the effects of the OMVs of *P. gingivalis* on the endothelium were analyzed. OMVs were isolated either from wild-type strain W83 as well as from a gingipain-deficient strain  $\Delta K/R$ -ab. Confluent endothelial cell monolayers infected with either W83 or W83-derived OMV displayed significantly increased dextran permeability over those infected with  $\Delta K/R$ -ab or its OMV. In addition, W83-derived OMVs induced significantly more vascular disease in a zebrafish larvae systemic infection model compared to the controls. In line with these data, human microvascular endothelial cells (HMEC-1) displayed an OMV-associated, gingipain-dependent decrease in cell surface levels of the intercellular adhesion molecule PECAM-1 (CD31) when examined by flow cytometry. In conclusion it was shown that OMVs from *P. gingivalis* mediate increased vascular permeability, leading to a diseased phenotype both in vitro and in vivo. Moreover, these data strongly implicate gingipains mediate these vascular events most likely via a mechanism that involves proteolytic cleavage of endothelial cell-cell adhesins such as PECAM-1.

**(4) Jasa, Erica E., et al. „Effects of enamel matrix derivative on clinical and inflammatory outcomes in periodontal maintenance patients: Randomized controlled clinical trial.“ Journal of Periodontology (2020)**

The basic question of this randomized controlled clinical trial was if local application of enamel matrix derivative (EMD) added to papilla reflection/root preparation (PR/RP) could enhance clinical and inflammatory outcomes and would be superior to a completely identical reference treatment applying saline solution instead in 50 PMT patients with generalized stage III-IV, grade B periodontitis presenting with a 6- to 9-mm interproximal PD. Rootswere treated with reflection of interproximal papillae, root planning assisted with endoscope evaluation, and acid etching, followed by EMD or saline application. Both groups applying either EMD or saline resulted in significant improvements in clinical outcomes (PD and CAL, BOP) from baseline to 12 months. No significant differences were found in clinical or inflammatory outcomes between the experimental and control groups.

## News from Industry

### Orthodontics



Intricate tasks are fundamental part of orthodontics, but clean working can help to shorten the entire treatment process. That might be achieved with the APC Flash-Free Adhesive from 3M Oral Care. With APC

Flash-Free Adhesive you will still have strength and predictability but with more efficiency and far less mess. There is no need for flash clean-up and the risk of bacterial build-up is significantly reduced.

The system's next generation, resin-soaked nonwoven mats adhere to the enamel for a more reliable bond that also eliminates the process of flash removal. And with individually sealed technology to prevent cross-contamination, you can assure peace of mind for your patients.

For more information, visit: <https://www.3m.com>

### Equipment



#### Vac Station

CAO Group's Aegis VacStation is found to eliminate 100% spatter and 99.8% aerosol in high-speed handpiece dental procedures. A related study performed at the Medical University of South Carolina (MUSC) is soon to be published in a peer-reviewed scientific journal. More details about Aegis VacStation can be found at: [caogroup.com](http://caogroup.com).

#### Purification system

Groundbreaking, portable air purification system from Omni CleanAir delivers infection control to everyday workspaces and eliminates dangerous airborne particles, inactivates viruses and bacteria and does so at the same ventilation rates required by hospitals. For more information visit: [omnicleanair.com](http://omnicleanair.com)





The product launch „Taiwan Excellence Smart Medical Express - Dentistry of Excellence“ showcased dental products from five Taiwan Excellence Award winners in autumn 2020. In addition to products for guided implantology, the award winners included innovations in the field of 3D printers. The 5 winners of the price are shortly introduced:

PED Inc. is a leader in minimally invasive surgery and presented IRIS and SimEx, two imaging systems that use real-time optical localization to digitally visualize the handpiece during implantation.

SATURN IMAGING specializes in the field of 3D diagnostics and planning software for implant dentistry. They presented ImplantMax, a total solution for guided implantology, ranging from digital planning to the implantation itself.

DENTMATE TECHNOLOGY CO, LTD. is a dental equipment provider and presented Dental Curing Light and Headlight, which are not only lightweight but also promise ease of use.

YOUNG OPTICS INC. is known in the fields of research, design, manufacturing and sales of optical components. They showcased a Digital Light Processing 3D printer that offers stable materials and can print twelve models within three hours.

DHEF, Taiwan's leading company in digital dental equipment, showcased firstly the Digirex PSP Scanner, a vision system in a small machine, and secondly Endomax Brite, which is designed to improve visibility in root canal treatments.

## Miscellaneous

The covid-19 pandemic has affected many aspects of our private and professional life and will continue to do so for the very next months. Although during last year much has already been published related to the virus and infection data, we would like to give a short summary of interesting facts about the pandemic.



Image: Pixabay (Gerd Altmann)

While during the first months in March and April 2020 there was no or little clinical relevance to support the required recommendations by dental organizations and health authorities meanwhile more and more facts on important properties of this virus emerged. Comparably soon it became obvious, that aerosol management would be the central task in dental care to reduce the risk of infection. **Aerosols** are suspended particles in the air being up to 5 µm in size. They are produced in everyday practice during speaking and breathing and can as well as been generated during dental treatments when rotating instruments are cooled with water or ultrasonic devices are used and spray mist is formed. Consequently, the World Health Organization (WHO) associated aerosol-generating medical procedures with increased risk of infection for medical staff from SARS-CoV-2. A recent review prepared by German dentists in cooperation with several German dental associations gives a broad overview on scientific background related to aerosol-borne pathogens and resulting recommendations for dental practitioners during this or other pandemics. For the first time, also an S1-guideline (German) has been drawn up in accordance with the regulations of the AWMF (Association of the Scientific Medical Societies) providing information on protecting dental professionals and patients from infection with SARS-CoV-2 and other aerosol-transmissible pathogens while ensuring basic dental care for the population. Similar **guidance** can be found in English on the regularly updated website of the American dental association (**ADA**) Specifically, for dentists active in the field of implantology the American Academy of Implant Dentistry (AAID) developed a White Paper. The recommendations include in particular: (i) what constitutes a dental implant related emergency, (ii) how patients should be screened and triaged, (iii) what personal protective equipment is necessary, (iv) how operatories should be equipped, (v) what equipment should be used,

and (vi) what, when, and how procedures can be performed.

There is no doubt, that worldwide the **dental education** was massively affected by the pandemic and the resultant measures such as closing universities and student clinics had enormous impact on dental education, particularly the reduction or complete mitigation of hands-on training. It can be expected that a number of dental students will be unable to complete their clinical requirements in time. Promising feedback was available by Bennardo et al. from Italy, reporting that their students showed positive attitudes towards e-learning. In general, interactive learning was welcomed by undergraduate students while post-graduate students were already familiar with blended learning concepts.



Image: Pixabay (Lachmann-Anke)

On the other hand, the massive changes in their education in combination with concerns related to reduced future incomes or limited job opportunities might lead to alterations in students' career plans. A respective small survey was conducted by Garcia et al. in Virginia (USA). Not surprisingly, a certain percentage of 11.5% reported such changes. Among final-year students 40% reported on difficulties to secure their desired post-graduation employment. The students were also questioned on their wellness status by means of several validated scales and those students, reporting changes in their plans, were categorized to perceive a higher stress level and had a higher anxiety score. Although the study in summary reveals that roughly 90% of the students would keep their plans one other fact should be highlighted: racially minoritized students were more likely to change their career plans as 31% of Black, 19% of Latinx and only 7% of White students reported on such changes.

However, equipped with some more knowledge and respective guidelines a lot of dentists came back to regular work and its worth to have a first review on the **economic effects** of this pandemic through the last year. For Germany the Medizinklimaindex (**MKI**)



Image: Pixabay (Gerd Altmann)

provides a valuable insight into recent developments and the overall "mood" in the medical market. It reflects the economic situation and expectations of physicians, dentists and psychological psychotherapists in private practice conducted by the German Foundation

“Stiftung Gesundheit”.

Interestingly, compared to the survey conducted in May 2020, the autumn survey revealed a rise in this index by 26.7 points. It then ranked even in a positive region (+1.6 points) for the first time in three years. Doctors looked in more optimistic about the future. The main reason for the sharp rise are the expectations of physicians for the coming six months: In May, 65.4% of all interrogated physicians still expected their economic situation to deteriorate while now only 28.7% do so. It is noteworthy that this value is even well below the pre-pandemic level. In particular, the positive experience with digital structures such as video consultation hours were indicators for improved expectations. There was a clear increase in all asked groups. The indices for general practitioners were only just in negative region, while those for dentists and psychological psychotherapists are well within positive values.

The situation on the US market can be observed in an regularly updated survey on the [ADA websites](#), where outcomes can be sorted according to individual states, dentist age groups, specialities and other details of dental practices. Also there, as a result of improved evidence based knowledge and respective guidelines the percentage of practices working with usual business were continuously rising over the summer starting in May with 3% up to 49% in August with a slight drop in November to 32.7%. Interestingly, from June onward, the percentage of completely closed practices was consistent at low levels of approximately 1%. Not surprisingly, the number of patients was lower than usual, but starting from August first practices had again patient volumes of about 95% related to pre-pandemic level.



End of January, a consortium of health professionals submitted a request to the WHO asking for public guidance to promote the use of nasal sprays based on data suggesting that nasal sprays containing xylitol and grapefruit seed extract such as those in products of XLe-ar or in Xylimed (by Hager Pharma GmbH) are antiviral, virucidal, antibacterial as well as bactericidal (predominantly to pneumococci). Such products might be of additional value to reduce the risk of infection.

Researchers from Münster University of Applied Sciences as well as from the Westfälische Wilhelms-Universität Münster (WWU) studied different options to **reuse FFP2**. The goal was to find out if and how potential SARS-CoV-2 pathogens on and in masks might be effectively eliminated using simple methods that can be implemented by users in their private homes without damaging the sensitive mask material and reducing the mask’s effectiveness. This project was funded by the German Federal Institute for Drugs and Medical Devices (BfArM) and [a brochure](#) is now available (in German) To this end, the team scientifically tested the effectiveness of various approaches that can be implemented in the home in the laboratory. These ranged from simple drying and washing of the masks to thermal treatment by moderate heating. The scientists were able to show that temperature in particular is a decisive factor in achieving simple and efficient reprocessing of FFP2 masks. The optimal result is achieved when the FFP2 mask is thermally treated at 80° C for one hour using the home oven in the upper-lo-



Recommended options to reuse FFP-2 masks in private use (Photo: B. Brandstetter)

wer heat mode. It is very important to maintain the temperature of 80° C, as the specific construction of the mask protects the viruses in a way that one hour at 70° C would not be sufficient to kill the majority of them. The viral load on the masks was completely eliminated by the oven treatment, leaving the protective effect untouched. To check the filter efficacy, the team of researchers was supported by two Münster-based companies (Hengst SE - filter specialist, and Hybeta GmbH - expert in technical hygiene). However, after 5 such cycles the mask should be eliminated. Alternatively, the masks might be dried at room temperature for 7 days. However, only the same person should reuse these masks as other germs from saliva and might still contaminate them.

Treatment	Reduction in SARS-CoV-2	Reduction of other germs from user	Functionality of filter and material
1 day at room temperature	not sufficient	not sufficient	nearly no change
7 days at room temperature	strong	partly	nearly no change
80 °C dry heat for 60 min	completely	strong	only slight (if T <90°C)
Steam (cooking pot)	strong	strong	loss of elasticity of strips
Microwave	different temperatures at different spots	different temperatures at different spots	danger of invisible damages
Dish washer / washing machine	?	?	damage of material and filter efficacy
UV-Light	no disinfection in inner parts	?	certain damage of material

Another interesting development could be a **self-disinfecting mask** that inactivates viruses at the touch of a button. Researchers of the Zurich university of applied sciences (ZHAW) around Prof. Yeretzi-an, are working together with the Swiss company Osmotex AG. The prototype made of electrochemical textiles shows an antiviral effect of over 99% and its planned to be market-ready in spring 2021.

**Glasses anti-fog holder in practical test:**

For use with disposable masks a holder was developed by a German dental technicians. It is easy to attach to the upper edge of the mouthguard and reliably prevents the annoying fogging of the glasses. However, the hard rims of the stiff plastic material might be inconvenient for some users. The holders can be ordered directly at: <https://www.boesingdentalshop.de>



Anti-fog protection by use of plastic holder, various mask holders (Photo: B. Brandstetter)

Mask wearing is required sometimes for an uncomfortable long duration. Not surprisingly, the masks are of great hindrance particularly during hair cutting. In search of a solution, the Ohrlizzo was born that is slightly different to other ideas to avoid the fixation behind the ear: The clients, do not have to remove the mask and it is also not covering the hair like in other models (like that one from Boesing). Further, the Ohrlizzo, is provided with an opening, so that customers do not have any restriction in hearing. It can be ordered directly from **Enzo Olizzo’s shop** .





A **special hint** for all who understand German and like listening on dental topics more than reading: Dental Talk with Björn and Olaf

The podcast of Björn Kersten and Olaf Tegtmeier on new trends or recent events - comes weekly on Monday and deals with the most exciting topics of the dental and marketing sector. Both know the areas by heart and give funny insights behind the scenes.

## Save the date

In view of the unchanged challenges due to Covid-19 and the expected continuation of the comprehensive restriction of personal contacts several conferences, meetings or fairs are either postponed or will be held on a virtual basis.

- Association of German Dental Manufacturers (VDDI) and Koelnmesse postponed the **International Dental Show (IDS)** from March until autumn 2021. The trade fair that was originally planned to take place from 10 to 13 March, will now be held from **22 - 25 September 2021**. The #B-SAFE4business concept that is based on the applicable Corona Protection Ordinance will also accompany IDS in September in order to offer the exhibitors and visitors the highest possible level of safety. The **International Medical College (IMC)** will take part and present newest offers in continuous dental education.

- The **Association of Dental Implantology (ADI)** has had to postpone the next ADI Team Congress. As a result, the ADI has announced that the Team Congress has been rearranged for **26 - 28 May 2022**, once again at **Manchester Central**, and will now be named the ADI Team Congress 2022. Full programme information will be provided shortly. For more information about ADI, visit [www.adi.org.uk](http://www.adi.org.uk)
- No update is announced so far for **CAMLOG: LOGIN TO YOUR FUTURE** on **23 - 24 April 2021, Berlin** (3rd Camlog Start-up-Days)
- on short notice for all dentists speaking German: one-day 40th International Symposium for oral and maxillofacial surgeons, dentists and orthodontists, this year only Online: **Friday, 12 February 2021**, for more information visit: [www.stanton-kongress.de](http://www.stanton-kongress.de)

第三屆中德學術研討會 (線上)  
The 3rd Sino-German Academic Symposium (Online)

2021年6月25日 14:30-22:05 (北京時間) | 2021年6月25日 08:30 - 16:05 (德國時間)  
14:30-22:05 25 June, 2021 (Beijing Time) | 08:30-16:05 25 June, 2021 (Germany Time)

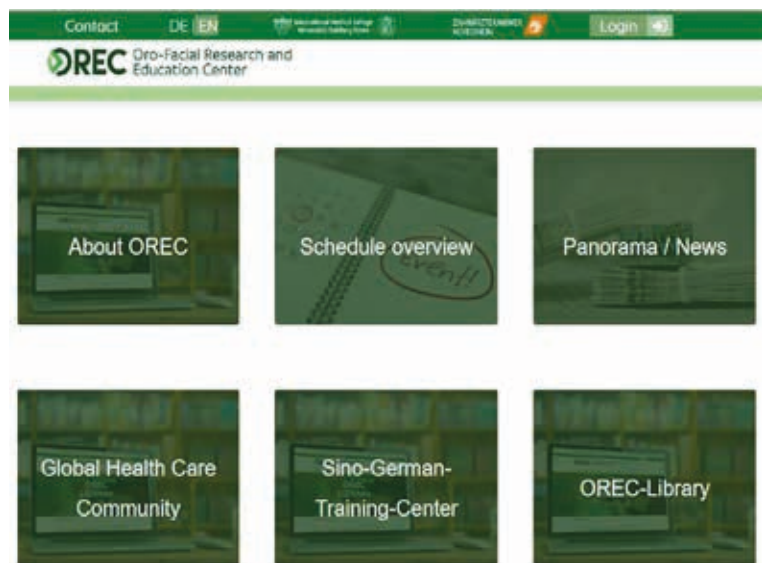
On **Friday 25th of June** we invite to our **3rd Sino German Academic Symposium** on dental sciences in cooperation with the Ninth People's Hospital and the Jiao Tong University in Shanghai.

Renowned speakers from China, Germany as well as international guests will present a broad range on latest techniques, improvements and the most current updates in all fields of Dentistry. On our website [www.imc-orec.de](http://www.imc-orec.de) you will find more information about the speakers, the live streaming schedule and registration.

In contrast to all the postponed local events our OREC platform offers a variety of „pure“ virtual events providing close contact with the referents in course of the events as well as continued discussions in specific chat rooms.

Have a look at our program for 2021 to be found in the schedule overview on our website ([www.imc-orec.de](http://www.imc-orec.de)). In June we plan to relaunch our platform starting first with freshly combined collection of courses on various dental specializations to be booked individually and thus fitting to your personal schedule and interests. A series of courses will be connected with specific E-learning units of our library and hence you can arrange your individual program for continued education. Special offers will be available for IMC-Alumni and additionally for booking of the whole course package.

As a very next feature networking features will be implemented. Finally, this newsletter will occur 3 times a year and collect condensed news from all fields of dentistry.



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