Tandlæge Foreningen

Online-symposium 2020

Challenges in the aesthetic zone

7. november 2020

VELKOMMEN

til Tandlægeforeningens
ONLINE-SYMPOSIUM
for tandlæger

Per Vult von Steyern
Faglig koordinator

Ole Thomas Marker
Symposium ansvarlig

Arrangementskomité:

Per Vult von Steyern, professor
Ole Thomas Marker, efteruddannelseschef, Tandlægeforeningens Efteruddannelse

Udfordringer i den æstetisk zone

Keramik i tandplejen har altid været forbundet med gode æstetiske og biokompatible løsninger. Desværre er keramik også forbundet med en række følelser og fordomme: "Det holder ikke", "det er for kompliceret" og "det kræver for meget tandsubstans" er almindelige forestillinger, som er baseret på gamle sandheder – mere end 30 år gamle sandheder.

Alle disse fordomme kan blankt afvises i 2020, når vi ser hvilke fantastiske muligheder dental keramik giver os i dag. Ingen anden materialegruppe end keramik giver os i dag muligheder for at producere højæstetiske tanderstatninger, minimalt invasive, farvestabile og biokompatible med lang funktionstid. Men for at vores behandlinger skal lykkes, har vi brug for viden. Viden om hvornår og hvordan de forskellige keramiktyper er forskellige og anvendes korrekt.

Forskellige typer af keramik kræver forskellige typer af præparation, overfladebehandling og cementering. Hvilke materialer er velegnede i fronten, hvilke kan bruges posteriort og hvad med keramiske broer? Hvilke typer af keramik kan du bonde og hvilke skal du bonde? Hvad skal teknikeren gøre, og hvad skal du gøre i klinikken? Hvordan får vi blødt vævet omkring protetiske keramer til at forblive sunde og smukke? Udfordringerne er mange og hvordan navigerer du sikkert? Svaret får du på dette års symposium med om Challenges in the aesthetic zone.

Vi har inviteret nogle af de førende i verden til at formidle inspirerende kliniske metoder og den allernyeste viden inden for tandkeramik. Verdenskendte klinikere, der kombinerer deres viden og kliniske færdigheder med inspirerende undervisning. Højt estimerede forskere, der er lige så kendt for deres forskningsresultater, som deres evne til at formidle viden på en enkelt og tillidsfuld måde.

Det er med stor glæde og stolthed, at jeg præsenterer pro-grammet for symposiet i 2020.

Professor Per Vult von Steyern

ONLINE-SYMPOSIUM FOR TANDLÆGER 2020
CHALLENGES IN THE AESTHETIC ZONE

13.00-13.05	**Velkomst**	
	Per Vult von Steyern	
13.05-14.00	**Adhesive challenges for glass ceramics, porcelain and tooth ...**	
	Bart van Meerbeek	
14.00-15.00	**The minimally invasive revolution**	
	Mauro Fradeani	
15.00-15.30	PAUSE	
15.30-16.30	**Bonding to Zirconia Ceramic – Reliable Procedures and Clinical ...**	
	Matthias Kern	
16.30-17.30	**Treating Miniralization Disturbances and Tooth Agenesis**	
	Klaus Gotfredsen	
17.30-19.00	PAUSE	
19.00-20.00	**Communication, Expectations and Predictability in Prosthetic Dentistry**	
	Vincent Fehmer	
20.00-21.00	**Translucent zirconium-dioxide, the material for the future?**	
	Per Vult von Steyern	
21.00	AFRUNDING	

13.05-14.00 / Bart van Merbeek

Adhesive Challenges for Glass Ceramics, Porcelain and the Tooth

Current restorative dentistry involves dental adhesive technology in nearly all tooth-restorative procedures. This lecture will focus on the use of modern adhesive technology to lute semi-direct and indirect restorations. Digital technology is indispensable in today's dental practice. The first digital revolution occurred several years ago with the introduction of CAD-CAM technology for the production of semi-direct (chair side) and in-direct (via dental lab) restorations. Currently, most CAD-CAM systems are based on 'subtractive' manufacturing processes, where restorations are milled out of industrially manufactured blocks. Various types of ceramic, resin-based composite and polymer-infiltrated ceramic CAD-CAM blocks are today available for chair-side and indirectly fabricated partial/full crown restorations. This lecture will address the different CAD-CAM mate-rials that are today available and their associated clinical adhesive luting protocols, hereby focusing on both the cement-tooth as the cement-res-toration interface. Inevitably, one may expect that 'additive' manufactur-ing processes or so-called '3D printing' will soon offer additional tooth-restoration opportunities.

Bart van Merbeek, Prof., Dr.
Bart Van Meerbeek obtained his DDS in 1988 and his PhD in 1993 at KU Leuven (University of Leuven) in Belgium. He continued his research activity abroad for one year at the University of Texas Health Science Center at San Antonio, Texas, and later also at the University of Missouri-Kansas City. In 1995, he became Assistant Professor ('Docent') at KU Leuven and

INSPIRATIONAL CHALLENGES

since then teaches Dental Biomaterials Science. In 1998 and 2002, he was promoted respectively to Associate Professor ('Hoofddocent') and Professor ('Hoogleraar'), and in 2005 to Full Professor ('Gewoon Hoogleraar'). His primary research interest involves studies related to the broad field of Adhesive Dentistry, including fundamental as well as clinical research regarding dental adhesive technology in particular. Newer research lines deal with Dental Ceramics, Cariogenicity & Biocompatibility of Dental Materials, Bioactive Materials and Pulp-preservation Material Technology. His research work has been published in more than 400 peer-reviewed journals and has been honoured with awards such as the 1996 triennial Robert Stock Award for best PhD dissertation in Biomedical Sciences, Albert Joachim Award in 1997, Award in Biomedical Sciences of the Research Council of KU Leuven in 1998, IADR Young Research Award in 2000, Smith-Kline Beecham Award in 2001, Academy of Operative Dentistry Buonocore Memorial Lecturer in 2003, CED-IADR (Continental European Division of IADR) Robert Frank Lecturer in 2008, 2014 IADR/AADR William J. Gies Award for the best 2014 JDR paper in the Biomaterials & Bioengineering Research category, and the 2015 IADR Wilmer Souder Award (IADR Distinguished Scientist award for Dental Materials). In 2003, he became holder of the Toshio Nakao Chair for Adhesive Dentistry. He was President of the Pan-European Federation of IADR in 2006-2007 and is currently serving as Secretary of the Continental European Division of IADR or CED-IADR. Recently in September 2019 (Madrid), he was elected as President Elect of CED-IADR to become CED-IADR president in September 2020 with the task to organize the 2021 CED-IADR/NOF Oral Health congress in Brussels (September 16-18, 2021). Since 2004, he is Editor-in-Chief of the Journal of Adhesive Dentistry.

INSPIRATIONAL CHALLENGES

Mauro Fradeani
MD, DDS

14.00-15.00 / Mauro Fradeani

The minimally invasive revolution

Learning objectives:

1. Define an appropriate esthetic and functional treatment plan
2. Learn how to minimize the invasiveness of the prosthetic treatment by altering the VDO, reducing the ceramic thickness and using appropriate bonding procedures
3. Learn how to achieve a predictable and long-lasting esthetic and functional result of the prosthetic rehabilitation

The presentation will discuss the fundamentals required to accomplish a pleasing, functional and long lasting esthetic outcome: treatment plan, team collaboration, understanding of the patient's needs and expectations and selection of restorative materials.
Some esthetic and functional parameters can significantly affect the outcome of a prosthetic rehabilitation. Properly addressing those factors through an accurate preoperative analysis and a correct data transmission to the dental lab will undoubtedly facilitate the achievement of a predictable and successful result as well as a perfect biologic integration of the restorations. A thorough understanding of the ceramic materials is also fundamental to manage complex rehabilitation cases. This presentation will explain how to select and optimize the use of metal-free ceramic materials even in full-mouth rehabilitations.

The prosthetic rehabilitation is presently undergoing many changes thanks to some revolutionary clinical procedures and technologies. An innovative operative protocol allows to face highly compromised clinical

EXPECTATIONS AND EVIDENCE

situations, with a minimally invasive prosthetic procedure (MIPP) that – thanks also to the VDO modification - guarantees a remarkable, long lasting resistance, thus maintaining a maximum amount of enamel.

Mauro Fradeani, MD, DDS
Past President of EAED - European Academy of Esthetic Dentistry (biennial 2003/2004) and Past President of AIOP - Accademia Italiana di Odontoiatria Protesica (biennial 1999/2000), he has served as Visiting Associate Professor in Prosthetics at Louisiana State University - New Orleans (USA) from 1999 until 2008. Active Member of The American Academy of Esthetic Dentistry, he maintains membership in The American Academy of Fixed Prosthodontics. He is Founder and Director of ACE Institute and of Fradeani Education.

He has been a member of the Editorial Board of Practical Procedures & Aesthetic Dentistry (PPAD) and presently is Associate Editor of The International Journal of Esthetic Dentistry (IJED) and member of the Editorial Advisory Board of the Journal of Esthetic and Restorative Dentistry (JERD). He is the author of the book “Esthetic Rehabilitation in Fixed Prosthodontics” translated into 12 languages, Vol 1 “Esthetic Analysis” and Vol 2 "Prosthetic treatment: a systematic approach to esthetic, biologic and functional integration", published by Quintessence International
He runs a private practice limited solely to prosthetics on natural dentition and on implants in Pesaro (Italy).

Følg med på Facebook,
hvor vi løbende opdaterer
med nyt om Symposium 2020.

facebook.com/tandlaegeforeningensefteruddannelse

EXPECTATIONS AND EVIDENCE

15.30-16.30 / Mattias Kern

Bonding to Zirconia Ceramic – Reliable Procedures and Clinical Applications

Bonding to silica-based dental ceramics using etching techniques and silanization is well established, but for bonding of dental oxide ceramics with little or no silica no particular method is generally accepted. The purpose of this lecture is to summarize the current knowledge on bonding to dental oxide ceramics and especially zirconia ceramic and its clinical applications.

Approved bonding methods to dental oxide ceramics require first cleaning, roughening and chemical activation through air-abrasion by pure alumina or silica-coated alumina particles. Secondly chemical coupling agents such as phosphate monomers, silanes or multifunctional primers are used depending on the surface composition after air-abrasion. Although a large number of laboratory bonding studies on zirconia ceramics exists, clinical long-term studies on bonded zirconia ceramic restorations without mechanical retention are still needed to prove whether laboratory bonding methods provide long-term durable adhesion under clinical conditions. Longer-term clinical results with minimally invasive resin-bonded zirconia ceramic restorations are presented.

Mattias Kern, Prof. Dr. med. dent. habil., FADM
Graduation from Dental School in Freiburg, Germany in 1985. Assistant Professor in the Department of Prosthodontics, University of Freiburg 1985-1991. Dr. med. dent. thesis 1987. 1991-1993 Visiting Research Associate Professor, University of Maryland at Baltimore, USA (Grant of

INSPIRATIONAL CHALLENGES

the German Society of Research). 1995 Dr. med. dent. habil. thesis, Vice Chairman of the Department of Prosthodontics, University of Freiburg. Since 1997 Professor and Chairman of the Department of Prosthodontics, Propaedeutics and Dental Materials, Christian-Albrechts University at Kiel, Germany.

In Dec 2011 Dr. Kern received the Schweitzer Research Award of the Greater New York Academy of Prosthodontics (GNYAP). Dr. Kern served as President of the German Society for Prosthetic Dentistry and Biomaterials (DGPro) from June 2012 until September 2016. In March 2020, Dr. Kern received the des IADR Distinguished Scientist Award for Research in Prosthodontics and Implants.

Dr. Kern serves in the Editorial Board of more than 10 peer-reviewed scientific journals and has published more than 400 scientific articles.Material Technology. His research work has been published in more than 400 peer-reviewed journals and has been honoured with awards such as the 1996 triennial Robert Stock Award for best PhD dissertation in Biomedical Sciences, Albert Joachim Award in 1997, Award in Biomedical Sciences of the Research Council of KU Leuven in 1998, IADR Young Research Award in 2000, SmithKline Beecham Award in 2001, Academy of Operative Dentistry Buonocore Memorial Lecturer in 2003, CED-IADR (Continental European Division of IADR) Robert Frank Lecturer in 2008, 2014 IADR/AADR William J. Gies Award for the best 2014 JDR paper in the Biomaterials & Bioengineering Research category, and the 2015 IADR Wilmer Souder Award (IADR Distinguished Scientist award for Dental Materials). In 2003, he became holder of the Toshio Nakao Chair for Adhesive Dentistry. He was President of the Pan-European Federation of IADR in 2006-2007 and is currently serving as Secretary of the Continental European Division of IADR or CED-IADR. Recently in September 2019 (Madrid), he was elected as President Elect of CED-IADR to become CED-IADR president in September 2020 with the task to organize the 2021 CED-IADR/NOF Oral Health congress in Brussels (September 16-18, 2021). Since 2004, he is Editor-in-Chief of the Journal of Adhesive Dentistry.

”Tandlægeforeningens online-symposium er målrettet tandlæger”

INSPIRATIONAL CHALLENGES

16.30-17.30 / Klaus Gotfredsen

Treating Miniralization Disturbances and Tooth Agenesis

The Special- clinic for Oral Rehabilitation at the Dental School in Copenhagen provides oral rehabilitation of patients with tooth development and mineralization disturbances. The restorative treatments endeavor good functional prognosis and aesthetic outcome. The presentation will discuss different ceramic materials used for reconstructions, and the clinical challenges, where aesthetic and psychological aspects of the appearance are essential for the young patient.

Klaus Gotfredsen, Professor
Professor og afdelingsleder på afdeling for Oral Rehabilitering ved Odontologisk Institut, Københavns Universitet. Forskningsaktivitet centreret omkring implantologi og protetik med mere end 125 publikationer i nationale samt internationale fagtidsskrifter og bøger. Afholdt mere en 200 nationale og internationale foredrag. Forskningsophold i Bern, Schweiz og Göteborg, Sverige. Opponent på doktor- og ph.d.-afhandlinger i Norge, Sverige, Finland, Danmark og Island. Vejleder for et tital af ph.d.-studerende og skolarstipendiater. Tidligere bestyrelsesmedlem og præsident af European Association for Osseointegration (EAO), formand for undervisningskomiteen i Scandinavian Society of Prosthetic Dentistry (SSPD) og med mangeårig tilknytning til bestyrelsen af Dansk Selskab for Oral Implantologi (DSOI). ITI medlem og fellow. Tilknyttet og arbejdet for Regionstandplejen i Region Hovedstaden og Odontologisk Videnscenter øst siden opstarten i 2006 og leder af Specialafdeling for Oral Rehabilitering, hvor disse patienter behandles protetisk. Over 30 års praktisk erfaring fra privat tandlægepraksis.

EXPECTATIONS AND EVIDENCE

19.00-20.00 / Vincent Fehmer

Communication, Expectations and Predictability in Prosthetic Dentistry

As new technologies are currently and faster than ever before changing the way we plan, fabricate and delivery our implant restorations, there are certain steps throughout the workflow that are in need of clear and new defined guidelines.

In this lecture all relevant steps will be elaborated in order to deliver a predictable and long term stable outcome. For example the selection of the ideal Ti-base, as it should be as long as possible and for FDPs the parts have to be cylindrical. Application of sandblasting on the Ti-Base surface along with the corresponding cement, for each best possible adhesion as well as best esthetic integration. To the final selection of the best restorative material for esthetic and longterm stable outcomes.

This was just a small but important step relevant to achieve predictable outcomes for these new types of CAD/CAM based restorations.

In the end of the course you will be aware of our Geneva treatment concept and decision tree that allows you to pic the correct indications and restorative procedures from the single implant crown all the way to the full arch FDPs. All of which is evidence based and adapted to the need of use in daily practice

EXPECTATIONS AND EVIDENCE

Vincent Fehmer, MDT
Vincent Fehmer received his dental technical education and degree in Stuttgart, Germany in 2002. From 2002 to 2003 he performed fellowships in Great Britan and the US in Oral Design certified dental technical laboratories. From 2003 to 2009 he worked at an Oral Design certified laboratory in Berlin, Germany - The Dental Manufaktur Mehrhof. In 2009 he received the degree as a MDT in Germany. From 2009 to 2014 he was the chief dental technician at the Clinic for Fixed and Removable Prosthodontics in Zurich, Switzerland.

Since 2015 he is dental Technician at the Clinic for Fixed Prothodontics and Biomaterials in Geneva, Switzerland and runs his own laboratory in Lausanne Switzerland.

MDT Fehmer is a Fellow of the International Team for Implantology, an active member of the European Academy of Esthetic Dentistry (EAED), and a member of the Oral Design group, the European Association of Dental Technology (EADT) and German Society of Esthetic Dentistry (Deutsche Gesellschaft für Ästhetische Zahnheilkunde, DGÄZ). He is active as speaker on a national and international Level.

Mr. Fehmer has received honors like the prize for the Best Master Program of the Year (Berlin, Germany). He has published numerous articles within the field of fixed prothodontics and digital dental technology. Also, he serves as reviewer for several international Journals and is a section editor for the International Journal of Prosthodontics.

"Som tilmeldt til Onlinesymposium 2020 kan du se eller gense symposiet i op til 4 uger efter live-streamingen"

EXPECTATIONS AND EVIDENCE

20.00-21.00 / Per Vult von Steyern

Translucent Zirconium-Dioxide, the Material for the Future?

The latest generations of translucent zirconia have many different names. Sometimes they are called translucent, high translucent, top translucent, ultra translucent and sometimes 3Y, 4Y or 5Y. Over the last decade translucency has been gained in different ways that all have in common that not only the translucency is changed, but also other properties of the zirconia material. Hence, in general, the more translucency that is gained, the lower strength and toughness remain together with the chemical stability that also might be affected.

From a clinical point of view, decisions on what material to use might be complicated since there are so many alternatives, not only regarding type of zirconia, but also regarding combinations with porcelain in so called semi-monolithic or monolithic designs.

The novelty with monolithic zirconia is that the zirconia material itself, earlier used as a core or framework material only, now is made more translucent than conventional zirconia, sometimes sufficient for meeting the different aesthetic expectations without the need of a veneering porcelain.

The objectives of the lecture are to give the clinician tools for how to choose among different zirconia materials and design for different prosthetic reconstructions.

EXPECTATIONS AND EVIDENCE

Per Vult von Steyern, Professor
Per Vult von Steyern is professor in Prosthetic Dentistry and chair of the Department of Materials Science and Technology, Faculty of Odontology, Malmö University, Sweden. He is a licensed specialist in Prosthodontics and researcher with Dental ceramics as his main research field.

He is an internationally recognized lecturer and was 2013 awarded the Swedish Dental Association price for “Best lecturer”. He has published several scientific papers in international scientific journals and several textbook chapters. 2015 he received the Swedish Dental Associations award for the best overview article of the year (2014). He is, furthermore, president of the Scandinavian Society for Prosthetic Dentistry and Swedish Dental Society.

"Pga. COVID-19 afholdes Tandlægeforeningens symposium i år som et online-event. Der vil være seks faglige indlæg fordelt på tre blokke med pauser undervejs”

EXPECTATIONS AND EVIDENCE

Tandlæge Foreningen

DS CERTIFICERING

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