Program SUMMER SCHOOL 2022

International Conference on Occlusion and Function in Dentistry



In honor of Prof. Rudolf Slavicek



<mark>UNIVERSITÄTSZAHNKLINIK</mark> MEDIZINISCHE UNIVERSITÄT WIEN his course of the Medical University of Vienna is operated by the Vienna School of Interdisciplinary Dentistry



Vienna School of Interdisciplinary Dentistry Education in Occlusion Medicine

SummerSchool 2022 content by VieSID

rev July 5th, 2022

VieSID Vienna School of Interdisciplinary Dentistry Wasserzeile 35 3400 Klosterneuburg, Austria

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WELCOME TO VIENNA



Dear colleagues, dear friends,

it is a great pleasure for us to welcome to SummerSchool 2022, the international Conference on Occlusion and Function in Dentistry at the University Clinic of Dentistry in Vienna. This year's conference is dedicated to Prof. Rudolf Slavicek, who sadly past away in January 2022. So the title of this years SummerSchool is "In honor of Prof. Rudolf Slavicek".

SummerSchool is five days of exchange among experts from different areas of occlusal medicine for dentists, dental technicians and specialists from affiliated areas as well as a platform to intensify the interdisciplinary network. There will be plenty of food for thoughts from various disciplines as well as a multitude of ideas from practice. In addition, there is enough time scheduled for discussions and exchange.

Again this year's SummerSchool is quite interactive featuring table clinics, poster presentations and a special dialog forum. One of the goals of SummerSchool is to invite you to share and discuss your knowledge and experience in an atmosphere of professionality and collegiality.

SummerSchool 2022 is organized by VieSID[®] in cooperation with the Medical University of Vienna and its University Clinic of Dentistry Vienna.

VieSID turns the concept of lifelong learning into reality.



Welcome to Vienna!

Vienna ([viːˈɛnə]; German: Wien [viːn]) is the capital and largest city of Austria with a population of about 2.7 million (metropolitan area). It is the second largest German-speaking city in the world (after Berlin).

Vienna is not only the capital of Austria, but also its cultural, economic and political center.

The historic center of Vienna is rich in architectural ensembles, including Baroque castles and gardens, art nouveau buildings as well as the late-19th-century Ringstrasse lined with grand buildings, monuments and parks. In 2001 the city center was designated a UNESCO World Heritage Site.

Vienna – also called 'City of Music' – plays an important role in all kinds of art like music, opera, theatre and applied arts.

And one should not forget the typical and famous Austrian dishes and specialties, served either in nice restaurants, typical wine houses (called ,Heuriger') or the famous cafés that have already been a second home to plenty of famous writers and philosophers.

Vienna hosts a number of international organisations, including the United Nations. Since many years Vienna has been the world's number one destination for international congresses and conventions. Vienna attracts about five million tourists a year.

More useful information on Vienna as well as an event calendar can be found at http://www.wien.info.at





Conference venue and surroundings:

University Clinic of Dentistry Vienna,

Sensengasse 2, 1090 Vienna, Austria



Public transportation from / to the conference center:

Public transportation in Vienna is fast and safe. It offers underground lines, trams and busses.

Just a few minutes from the Clinic there are stations for tram, bus and underground lines. ightarrow



The historic center of Vienna can be reached in a walking distance of about 15 minutes.

The nearest parking garage is in Sensengasse just opposite the clinic.

Taxi stands are located nearby.



VIENNA INTERNATIONAL AIRPORT

Transfer time from Vienna International Airport to the city center and vice versa is about 30 minutes depending on traffic situation.

- Bus: Vienna Airport Lines depart to the airport at 20-minute intervals. Stations at Morzinplatz/Schwedenplatz (between 04:50 and 24:00 daily) or at Train station West (between 05:10 and 23:10 daily). Cost: approx. EUR 8,00 one way, EUR 13,00 both ways. Duration: approx. 20-30 min. http://www.postbus.at/de/Flughafenbus/Vienna_AirportLines/index.jsp
- Train: Train S7 leaves from Landstrasse/Wien-Mitte at 30 min. intervals between 05:00 and 23:45 daily.
 Cost: approx. EUR 4,40 one way. Duration: approx. 30-40 min.
 http://www.oebb.at/de/Reiseplanung/Fahrplanauskunft/Fahrplanbilder/Detail_907/kif907_15.pdf
- **Car:** Take expressway A4 from and to the Airport to Vienna. Airport and city centre are signposted.
- **CAT:** The City Airport Train runs at 30-minute intervals from 05:36 to 23:06 daily from the train station "Landstrasse/ Wien Mitte" to the airport Cost: EUR 11,00 one way, EUR 19,00 both ways. Duration: approx. 16min. www.cityairporttrain.com
- **Taxi:** Taxis are available directly in front of the arrival hall at the airport and everywhere downtown. Cost: approx: EUR 40,00 from the airport to the city center and v.v.

GENERAL INFORMATION

BANK AND EXCHANGE

Banking hours in general are Monday, Tuesday, Wednesday, Friday 08:00-12:30 and 13:30-15:00, Thursdays 08:00-12:30 and 13:30-17:30.

ATMs are located outside most banks, cash can be withdrawn there 24/7.

National and foreign Maestro cards (cash cards) as well as Mastercard, AMEX, Visa and Diners are accepted. Credit cards are also accepted by numerous hotels, restaurants, shops and gas stations.

CONFERENCE ADMINISTRATION DESK

For all remaining queries, including new registrations, please ask the staff at the registration desk onsite upon arriving at the conference.

The registration desk operates during the following hours:

| July 19 | 16:00 - 19:00 |
|---------|--|
| July 20 | 07:30 - 18:00 |
| July 21 | 07:30 - 18:00 |
| July 22 | 08:00 - 18:00 |
| July 23 | 07:45 - 18:00 |
| July 24 | 08:00 - 15:00 |
| | July 19 July 20 July 21 July 22 July 23 July 24 |

CONFERENCE LANGUAGE

SummerSchool 2022 will be held in English.

CONFERENCE REGISTRATION

Conference registration is also possible at our Conference Administration Desk. Conference Fee is : Euro 1.290,00 per person.

CURRENCY

The official Currency in Austria is EURO (€).

ELECTRICITY

The main voltage in Austria is 220V.

EDUCATION CREDIT

This course is awarded 47 Hours of workload. For non-Austrians certifiacte can be submitted to local dental association for acknowledgement.

GET-TOGETHER-DINNER

Friday 22 July 2022, 19:30, at Heuriger Fuhrgassl Huber (Neustift am Walde 68, 1190 Vienna) 70 € (not included in participation fee). Ask at the Registration for more Information.

INSURANCE AND LIABILITY

All participants are encouraged to make their own arrangements for health and travel insurance as the conference organizers cannot be held responsible for any personal injury, loss, damage or accident to private property, or for additional expenses incurred as a result of delays or changes in air, rail, road or other services, strikes, sickness, weather and other causes.

LUNCH BREAK

Participants will receive a voucher for each day, valid for a lunch menu and a soft drink at the cafeteria of the clinic. In order to keep the waiting time as short as possible, we kindly aks you to pick up your lunch-voucher at the registration desk. On Sunday a buffet-style lunch will be served in the meeting area.

SHOPPING

Shops are generally open from Monday to Friday 09:00 - 18:00 and Saturday 09:00-17:00.

SMOKING

Austrian law limits or prohibits smoking :

- In offices, schools, universities and other educational premises,
- In restaurants without smoking rooms.

TIME

Vienna is in Central European Time Zone, one hour ahead of Greenwich Mean Time (GMT).

TIPPING

Service is usually included in the prices in bars and restaurants. Tips are always welcome at usually 10%.

USEFUL TELEPHONE NUMBERS

Ambulance:144Fire Brigade:122Police:133

Taxi: +43 (0)1 31300 or +43 (0)1 40 100

WEATHER

The forecast for the temperatures in Vienna in July is between 25–29° Celsius by day, nights are cooler.

DAILY PROGRAM

Program SUMMER SCHOOL 2022

International Conference on Occlusion and Function in Dentistry

'In honor of Prof. Rudolf Slavicek'

20 – 24 July 2022



UNIVERSITÄTSZAHNKLINIK MEDIZINISCHE UNIVERSITÄT WIEN

This course of the Medical University of Vienna is operated by the Vienna School of Interdisciplinary Dentistry



Vienna School of Interdisciplinary Dentistry Education in Occlusion Medicine

| | | VieSID Summer School 2022 | ek | |
|--|--|--|---|---|
| Wed, 20 July 2022 | Thu, 21 July 2022 | Fri, 22 July 2022 | Sat, 23 July 2022 | Sun, 24 July 2022 |
| TMD pillars: diagnostic, research and care | Early preventive treatment of malocclusions | Bone Physiology | Condylography as interdisciplinary diagnostic tool | Table Clinics |
| J.D. Orthlieb | S. Sato | D. Storino | A. Nagy | |
| 8:30 - 12:30 | 8:30 - 13:00 | 9:00 - 12:00 | 8:45 - 12:00 | 9:00 - 12:00 |
| O. Schierz - Pros and cons of the DC/TMD | S. Sato - Early treatment for malooclusion: why, how and when | | K. Parlett - Condylography: Facts & Fiction | 3D splints: the dental and lab work (D. Singh, T. Vaskovic, D. Garg) |
| E. Plehslinger, A. Skolka - Vienna University Clinic of Dentistry: diagnostic and treatment procedures for TMD | A. Shirasu, M. Shirasu - Early Class II & III treatment by vertical dimension control: long-term results | J. Helms - Bone physiology and the craniomandibular system. Part I | S. Sato - Concept of Condylography in the diagnosis and treatment of TMD | Practical aspects of the Temporary Overlays Guided Orthodontics - ToGo approach (M. Assis, A. Londono, N. Oppermann, D. Ovando) |
| - - | | Break | | Occlusogram: wax and digital (E. Zanatta) |
| Break | Break | | Break | |
| V. Fala, V. Lacusta, G. Bordeniuc - Complexity of modern diagnosis and treatment of temporomandibular dysfunctions | O. Kobylyanskyy - Class II overlay approach: success and failure | J. Helms - Bone physiology and the craniomandibular system. Part II | A. Szygenda - Clinical instrument analysis in Interdisciplinary Dentistry | TMJ MRI clinical interpretation (M. Schmid-Schwap) |
| orthodontics. A testimonial based on my 27 years of experience | R. Velasquez - Early treatment of MLD malocclusion | LUNCHBREAK | LUNCHBREAK | EAT & LEARN |
| LUNCHBREAK | Round Table | | | Poster Presentation & Discussion (A. Marniere) |
| Interdisciplinary treatment of dysfunction | Complex cases | Bone Physiology / Modern-day materials for clinical success | Temporary Overlays Guided Orthodontics - ToGo | VieSID Research |
| E. Ury 13:30 - 18:00 | D. Togni 14:00 - 17:30 | D. Storino / I. Tester 13:00 - 17:00 | C. Basili 13:00 - 17:30 | H. Proenca 13:00 - 15:00 |
| LUNCHBREAK | LUNCHBREAK | P. Pietschmann - Pathophysiology of metabolic bone diseases | plane control | Inclination of palatal plane in cephalometric analysis & Report on CNO Congress, Marseille |
| H. Proenca - Occlusal Medicine and patients' well-being | P. Mancia - A patient with Arnold-Chiari and Eaole syndromes. | Round Table | A Londono, M. Assis, D. Ovando, N. Oppermann - The ToGo approach. Part I | E. Ury, T. Haberl, C. Fornal, C. Slavicek - Clinical consequences of a wrong terminal hinge axis I Cazacu, M. Tighinaanu, G. Bordeniuc, V. Fala - The use of articulator and splints in peorthodontic diagnosis and treatment treatment |
| X. Rausch-Fan, T. Vaskovich - Innovations and limitations of digital dental reconstruction for TMD patients requiring change in vertical dimension | In memory of Dr G. Chiogna | Break | | C. Fornai - Literature report |
| | I Toster. Somienning a challenging reconstruction | T Sulaiman - Malorials in Nintlal Dontistry - Are We There Vol? | Break | |
| Break | r. iestei - sedneitriniĝ a citalitetiĝiniĝ reconstruction. | ı. Sulanınan - Materials in Jüğilai Dennisi ÿ…Are we There tet? | | |
| D. Singh, A. Landry, E. Piehslinger, A. Gahleitner, M. Schmid- | Break | T. Sulaiman - Ceramic OnlaysContemporary Guidelines for | A. Londoño, M. Assis, D. Ovando, N. Oppermann - The ToGo approach. Part II | |
| Schwap, X. Rausch-Fan - Morphological evaluation of TMJ articular disc position in patients treated with Controlled Mandibular Repositioning concept | N. Lopukhova - Non surgical treatment | Clinical Success | | |
| D. Garq, D. Singh, T. Vaskovich, X. Rausch-Fan - The dawn of | or bilateral condyle tractures | | Round Table | |
| a new Horizon: stepping from conventional dentistry to functional digital dentistry | | | | - |
| | | 19:30 Get-together dinner at traditional restaurant | | |

Tuesday, July 19th, 2022

The conference program is subject to any changes of lectures and/or lecturers without prior notice.

Pre-SummerSchool seminar

17:00-19:00



Miguel Assis / Alejandra Londoño

Pre-SummerSchool Seminar

Abstract

This Pre-Summer School presentation is intended to introduce newcomers to the Vienna Occlusion Concept, specially to the unfamiliar terminology, that sometimes can be confusing, like the difference between Reference Position (RP) and Centric Relation (CR). In our offices, we receive many patients that have had previous orthodontic and/or prosthodontic treatment and sometimes even orthognatic surgery.

Unfortunately, most treatment plans are done without a concept behind, with no function in mind, no dynamics, just aesthetics. This leads to many functional problems. We will present a case, to illustrate in a clinical way, how we use the concept to establish a correct diagnosis and treatment plan, in order to treat the patient in a deeper way than just providing a beautiful smile, but also from the medical aspect. That's why we call it Occlusion Medicine.

CVs:

CV – Alejandra Londoño

Alejandra Londoño is an orthodontist specialized in the functional analysis of the masticatory system and condylography. Her experience

in the topic derives from the advanced studies she conducted, her clinical practice and research activities. She first graduted and specialied in Orthodontics in Colombia, and then obtained an MSc in Prosthodontics, Medical University of Vienna. She successfully conducted further postgraduate studies at Danube University, Austria and Kanagawa Dental University, Japan. She attended the VieSID courses before joining the VieSID team of instructors.

CV – Miguel Assis

Miguel Assis is a highly specialized orthodontist practicing the concepts of Interdisciplinary Dentistry while educating himself thorugh postgraduate courses on advanced orthodontic techniques and function and dysfunction of the masticatory organ at various Schools, including a MSc in Prosthodontics at the Medical University of Vienna, the Kanagawa Dental University, Japan, and the Santiago de Compostela University. He also attended the VieSID courses before becoming a VieSID instructor himself. His expertise includes the use of condylography as monitoring tool suppoorting the diagnostic assessment.

| Notes: | | | |
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Wednesday, July 20th, 2022

Morning session TMD pillars: diagnostic, research and care Afternoon session Interdisciplinary treatment of dysfunction

Chair: J.D. Orthlieb Chair: E. Ury

The conference program is subject to any changes of lectures and/or lecturers without prior notice.

| 08:00-08:30 | Registration | |
|--|-----------------------------|--|
| 08:30-08:40 | Opening | |
| | Opening Statement & Welcome | |
| TMD pillars: diagnostic, research and care | | |
| 08:40-09:30 | | |



Miver Schierz Austria

Pros and cons of the DC/TMD

Abstract

In most counties, local experts and organizations provide local examination forms for patients with temporomandibular disorders (TMD). These compete with each other for dominance and sometimes evolve by the judge of their creator. However, with the Research Diagnostic Criteria for Temporomandibular Disorders (RDC/TMD), an international uniform basic examination standard was established and published in 1994. The initial idea was a consistent standard for surveys and focused on the United States of America. However, successively researchers from other countries applied these criteria too. The consistent basis allowed researchers to compare their data and combine the gathered information, propelling the scientific knowledge in this field forward. This knowledge gained resulted in updated criteria in 2014 (DC/TMD), now depleted by "research" and published by a worldwide expert community. The goal is no longer to include researchers only but to develop and establish a universal examination standard in the TMD expert dental practice. While such measures in common chronic diseases are standard in general medicine, in dental medicine, these are lacking. The DC/TMD shall remedy this shortcoming in patients with TMD. We will critically discuss the DC-TMD, highlighting its purposes, points of strength, and limitations. Furthermore, in this lecture, we will have an outlook on what the DC/TMD may become.

CV

Topics of the professional career

Dentist at the Department of Department of Prosthetic Dentistry and Materials Science at Leipzig University

Supervision of clinical education in postdoctoral training

Management of the universities consultation hour for temporomandibular disorders (TMD) Translation of the DC/TMD into the German language

Establishment of an INfORM calibration center in Leipzig for TMD examination training Management of the consultation hour for dental materials allergies

Postdoctoral qualification (habilitation) with the topics quality of life and TMD Specialist for prosthetic dentistry of the DGPRO

Specialist for functional diagnostics and therapy of the DGFDT Acting director of the Department of Prosthetic Dentistry and Materials Science at Leipzig University

Editorial Board in medical journals Seniorenzahnmedizin BMC Oral Health Journal of Evidence Based Dental Practice MDPI Biomedicines

Guest Editor

MDPI Biomedicines, Special Issue "Modern Polymers for Dental Application"

09:30-10:30



Eva Piehslinger / Astrid Skolka Austria

Vienna University Clinic of Dentistry: Diagnosis and Treatment Procedures for TMD

Abstract

The University Clinic of Dentistry Vienna and Prof. Rudolf Slavicek's teachings are inseparably linked. His concepts for diagnosis and therapy of TMD patients are the fundaments onto which we have developped our clinical strategies for the treatment of craniomandibular system dysfunction.

Our treatment plans are both comprehensive and individually tailored. This applies not only to dental treatments but also to pre-therapy, which sometimes requires an interdisciplinary approach. A standardised diagnostic procedure is advantageous allowing to distinguish a simple from complex, dysfunctional cases. A step-by-step approach, similar to a checklist for aeroplane pilots, guarantees to detect every finding, no matter how minor, which may then be a deciding factor for a successful rehabilitation. The use of imaging diagnostic and instrumental analyses are integral part of our diagnostic approach

Diagnosis always starts with an extensive and detailed anamnestic inquiry to give the patient the possibility to present his major health problems. The next steps are the clinical and instrumental functional analyses which will be shown in detail during the lecture. Emphasis is put on the occlusal evaluation of the articulator mounted casts. According to the patient's chief complaint the therapeutic possibilities are discussed. The Viennese concept encompasses interdisciplinary treatment approach including splint therapy, physiotherapy, myofunctional logopedic therapy and in some cases psychiatry.

The occlusal situation is re-evaluated during treatment, and, if occlusal rehabilitation is need, the case is waxed according to Slavicek's principles of sequential guiding with canine dominance. The final treatment procedures are again discussed with the patient which will include orthodontic and / or prosthodontic treatment or minor occlusal corrections.

The prosthetic methods in use are also varied, including fixed prosthetic restoration, implantsupported prosthetics, or removable solutions which also require dental know-how to comply to biomechanical guidelines.

The follow-up care of prosthetic patients, especially if rehabilitation has taken place, is crucial, also as confirmation for the dentist that the treatment plan was adequate. If both the patient and

| | the dentist are satisfied by the aesthetics and function of the prosthetic rehabilitation over a long period of time, the treatment goal has been achieved. |
|-------------|--|
| | The task of the University Dental Clinic is also to build upon Prof. Slavicek's concepts by introducing research-based advances and new technologies. |
| | CV – Eva Piehslinger 1979-86 - Study of Medicine at the University of Vienna 1986 – Graduation as medical doctor, MD 1987-89 – Study at Dental School / University of Vienna Feb. 1989 - Graduation with excellent success, DDS March 1989 - University Assistant. at the Prosthodontic Department of the Dental School / University of Vienna (Head: Univ.Prof.Dr.R.Slavicek) July 1992 - Vice-head of the prosthodontic department 1998 - Provisional Head of the Prosthodontic Department of the Dental School (University of Vienna) 1999 - Full Professorship at the Dental School of Vienna 2000-2003 - Vice-dean at the medical University of Vienna from 2002 - Vice-president of the Austrian Dental Association from 2006 - Head of the Dental Study Committee |
| | CV – Astrid Skolka Since 03/2003 Resident at the University Clinic of Dentistry Vienna Clinical Division of Prosthodontics (Head: Prof. E. Piehslinger) |
| | 2007-2009 Postgraduate education at the Danube University Krems "Functions and dysfunctions of the masticatory organ" (Head: Prof. R. Slavicek) |
| | Field of activity: Special outpatient clinic for temporomandibular disorders (deputy head) Specialisation in the field of instrumental functional diagnostics Teaching activities in dental studies and postgraduate education National and international lectures and publications Member of various professional societies |
| 10:30-11:00 | Coffee break |
| 11:00-11:45 | Image: Second systemImage: Second system |
| | disorders, affecting the stomatognathic system structures, with various etiology and pathogenetic mechanisms involved, with extensive implications in the clinical presentation of the disorder. |

Moreover, TMDs frequently can co-occur with a number of overlapping medical conditions and

depending on the chronicity status and other involved pathological factors (psychosocial distress, pain amplification, autonomous dysfunction, etc.) may present challenges for the diagnosis and further management of the disorder. The complexity is further amplified by the lack of a common approach to TMD. Currently, the biopsychosocial model approach gains more widespread use, representing a broad model that applies the best scientific evidence from multiple fields to the care of individuals with a TMD, by acknowledging the diversity of causes and clinical presentation, that affect differing parts of the stomatognathic system and potentially other body systems, and require varied, and sometimes multiple, treatment modalities.

A variety of treatment modalities have been proposed over the years, with some becoming obsolete while others are gaining in popularity, but nevertheless, it seems that there is no single solution for every case as many different symptoms are included in TMD. Controversies exist in the literature regarding the diagnosis and the management protocol for TMD, hence the selection of treatment modality may often be largely influenced by the expertise of the treating healthcare provider .A systematized and standardized diagnostic protocol, consisting of valid and verified procedures, with the inclusion of additional investigative methods based on a holistic/multidisciplinary view of TMD, may present a sound and informative basis for directed clinical diagnosis, treatment planning and complex management of temporomandibular dysfunctions.

CV – Valeriu Fala

MSc, PhD, ScD, Associate Professor, Head of Department of Therapeutic Dentistry State University of Medicine and Pharmacy «Nicolae Testemițanu», Republic of Moldova Author of more than 55 inventions in the field of dentistry. Participant at national and international invention fairs (Moldova, Romania, Ukraine, USA, Belgium, Switzerland, China, Poland, Germany, Czech Republic, Spain, Taiwan, China, South Korea), awarded with 61 medals, including 26 gold, 19 silver and 11 bronze medals and others.

In 2010, his practice received the Gold Medal of the InfoInvent Fair awarded by WIPO (World Intellectual Property Organization) for Innovative Enterprises.

In 2018, he has received the Gold Medal of the InfoInvent Fair awarded by WIPO for Innovational Activity. Author of more than 92 scientific articles in national and international journals. Author of clinical guidebooks and monographs. Double champion (2001, 2004) of the International Contest for Restorative Dentistry "Prisma Championship" (Poltava, Ukraine). 1st place at the International Dental Contest of Clinical Cases, Moscow, Russia, 2004. Vice-president of Association of Stomatologists of Republic of Moldova (ASRM). From 2018 - Fellow of the International College of Dentists. For his Innovational activity, he has received several titles, including Commander of the Kingdom of Belgium, Commander of the Stomatological Medicine Journal (Republic of Moldova), member of the editorial board of the Stoma Edu Journal (Romania).

CV – Victor Lacusta

Academician, PhD, University Professor, Department of Complementary and Alternative Medicine, State University of Medicine and Pharmacy «Nicolae Testemițanu», Republic of Moldova

Habilitated Doctor in medical sciences (1991), University Professor (1991), correspondent member of the Academy of Sciences of Moldova (2000). He is the founder of the scientific school in the field of clinical physiology and of traditional medicine. Under his supervision, they were improved and implemented some new diagnostic methods (electro- and thermos-diagnostic methods), prophylaxis and treatment of systemic disorders, disorders of the nervous system, internal organs and locomotory apparatus.

Author and co-author of more than 354 scientific publications, including 18 monographs. Owner of 6 patents. Under his supervision, there were defended 9 doctoral theses and 1 habilitated doctor thesis. He is the President of the Republican Commission for Attestation in Traditional Medicine, Kineto-therapy and Sports Medicine, President of the Association of Traditional Medicine from Moldova, chairman of the Expert Commission on Human and Animal Biology of the National Council for Accreditation and Attestation, editor-in-chief of the Journal of the Traditional Medical Association in the Republic of Moldova, member of the editorial board of the Romanian Journal of Acupuncture, member of the editorial board of the International Traditional Medicine magazine. East and West. He was awarded the title "Homus Emeritus".

CV - Gheorghe Bordeniuc

University Assistant, Department of Therapeutic Dentistry PhD Fellow, State University of Medicine and Pharmacy «Nicolae Testemițanu», Republic of Moldova

Coauthor of more 24 articles in national and international journals. Has participated in numerous scientific congresses and conferences (Austria – Vienna, Turkey – Istanbul, Romania – Iasi, Bucharest, Galati; Moldova – Chisinau, Ukraine – Kiev). Participant at national and international invention fairs (Moldova, Belgium, Switzerland, Poland, Germany) – 1 gold medal, 2 silver medals. From 2016, he is a PhD fellow at the "Nicolae Testemiţanu" University of Medicine and Pharmacy. Has underwent trainings and continuing education courses – Romania (Bucuresti), Moldova (Chisinau), Ukraine (Kiev, Odessa). Currently – University Assistant at the Department of Therapeutic Dentistry at SUMPh "Nicolae Testemitanu", Republic of Moldova.

11:45-12:30



Petros Kokkinos Cyprus

Conventional versus craniomandibular orthodontics. A testimonial based on my 27 years of experience

Abstract

Conventional orthodontics (CO) refers to malocclusion based on the static relationship of the dental arches. It does not take into consideration the dynamic occlusion and the dysfunction that can be sometimes invited by it. It also failed to recognise the phylogenetic structural change that happened to the maxillofacial skeleton of Homo Sapiens as a result of the evolution which eventually made occlusion to play a vital role on the protection and support of the TMJ and also made it connected with the limbic system of the brain. It is an approach that mainly relies on techniques rather than to principles. An extremely important principle is the control of the inclination of the occlusal plane which evokes the great adaptability that condyles and mandible have.

The use of these principles from Craniomandibular Orthodontics and Occlusion Medicine (CMOOM) enables us to treat most of the dysfunctional problems as well as the skeletal problems on growing and non-growing patients in a way that the parameters of occlusion, skeleton, neuromuscular component, TMJ's, brain are in harmony. This presentation will identify the basic differences between CO and CMOOM, show the limitations of CO in the treatment of dysfunctional patients and show a variety of cases that cover the whole spectrum of orthodontics, some of them treated previously unsuccessfully with CO and eventually corrected with CMOOM.

CV

Dr. Petros Kokkinos received his DDS degree from the dental school of Athens university in 1989. He specialized in Orthodontics in the Louisiana State University (LSU), New Orleans, 1991-1994.

He worked in the research centre of the LSU and his research project "Dietary modification of the PGE2 level in rats and rate of teeth movement" was chosen for the 20 best in the world among 6500 research projects and competed for the Hatton award at the International Association of Dental Research Congress, Chicago, 1992.

In 1994 he was honoured by the state of Louisiana for the best research among all postgraduate students of all specialties at LSU. In the same year he was honoured by the LSU department of orthodontics with the James P. Bordelon award for the best clinical performance among all the postgraduate students in orthodontics.

He has published scientific articles in international scientific journals such as the American Journal of Orthodontics and Dentofacial Orthopedics.

He presents lectures in Europe, USA and the Middle East. He is a member in many scientific organisations in Cyprus and abroad. The last few years, he has taken numerous courses with Professor Sadao Sato and Dr. Heike Kramer. His new field of expertise is the joint related orthodontics where treatment planning is based on the condylar inclination and the modification of the occlusal plane inclination. He is a visiting lecturer at the postgraduate program of the department of orthodontics at LSUMC in the USA.

12:30-13:30 Lunch break

13:30-14:00



Heloisa Proenca Portugal

Occlusal Medicine and patients` well-being

Abstract

In these past years taking care of our health has become one of our greatest activities. Occlusion Medicine and Occlusion health go hand-in-hand and neither should be over looked. Because everything is connected, we should look at the human body as a whole. By scientific evidence and high-end technology, combined with advanced occlusion medicine treatment, will not only help heal the craniomandibular system, but revitalize body and mind's health and balance.

CV

1996 Degree in Dental Medicine (DDS), Higher Institute of Hearth Sciences Egas Moniz, Lisbon, Portugal

1996 – 1997 Postgraduate Program in Orthodontic and Orthopedic Treatment in the Growing Patient. Dr. James McNamara, Madrid, Spain.

1997 – 1998 Postgraduate Program in Orthodontics and Functional occlusion. Prof. Dr. Ronald H. Roth and Robert E. Williams, U. S. A.

1997 – 1999 Graduate studies in Orthodontics, European Center of Orthodontics, Madrid, Spain. 2004 – 2007 Master in Dental Science (MSc) in the specialization of Orthodontics, Donau Universität Krems, Austria.

2008 – 2013 Postgraduate student, Kanagawa Dental University, Yokosuka, Japan. 2009 Award for Best Poster – "Cl. II Skeletal Anterior Open Bite".

2013 Award for Best Scientific Presentation, Award of Prof. Dr. Bação Leal, Lisbon, Portugal. 2014 Doctor in Dental Science, PhD degree, in Kanagawa Dental University, Yokosuka, Japan, with the title: "A 3D computerized tomography study of changes in craniofacial morphology of Portuguese skulls from the eighteenth century to the present"

2014 Award for Best Scientific Presentation, IaaiD Asia, Japan.

2016 Professor in a Postgraduate Functional Orthodontic Course, Portugal (CMO Education)

Professional Experience: 1996 Foundation of a Private Clinic. Clinical Director Dentist – Specialist in Orthodontics, Center for Oral Medicine. (Private office in Beja, Portugal) 1996 – 2004 Assistant Professor in the Department of Orthodontics, Higher Institute of Health Sciences Egas Moniz, Lisbon, Portugal. 1996 – 2004 Clinical Director Dentist, Center for Oral Medicine in Higher Institute of Health Sciences Egas Moniz 2006 - 2007 Co-adviser in the postgraduate University Course, Donau-Universitat Krems, Austria 2007 – 2008 Member of the Examination Board in the Postgraduate University course "Interdisciplinary Therapy", Donau-Universitat Krems, Austria 2011 – 2014 Scientific researcher at the Centre for Forensic Medicine, Coimbra, Portugal 2011 – 2014 Reviewer of Scientific Articles - American Journal of Orthodontics (AJO), 2017 2014 Member of South European Journal of Orthodontics and Dentofacial Research (SEJODR) 2014 Member of American Association of Orthodontics (AAO) 2014 Member of World Federation of Orthodontics (WFO)

14:00-15:30



X. Rausch-Fan / T. Vaskovich Austria

Innovations and limitations of digital dental reconstruction for TMD patients requiring change in vertical dimension and temporomandibular joint disorders

Abstract

The transition to a digital age is an irreversible global trend. The rapid development of digital technology in dentistry requires new skills from practicing dentists and dental technician. Computer and digital devices provide advantage of faster, more precise and predictable in restorative dentistry comparing to conventional and manual technology. However, in rehabilitation and reconstruction of functional occlusion, in particular, for patients with temporomandibular joint disorders there is still big challenge with digital technology. This lecture will present an innovative digital workflow of computer-assisted-design/computer-assisted-manufacturing (CAD/CAM) and fabrication procedures for full mouth reconstruction cases with change of vertical dimension; and specially assess different diagnostic systems and digital set-up of occlusion plan and mandible jaw position. In addition, the therapeutic position of TMD cases with conventional digital workflow and fabrication procedures will be evaluated critically and an innovative approach of using digital technology in controlled mandibular repositioning (CMR) method will be proposed and discussed.

CV – Xiaohui Rausch-Fan

Education:

- 1992 Doctor Degree of medical Science (PhD), Nippon Medical School, Tokyo, Japan
- 1998 Doctor Degree of medicine, medical school, University of Vienna, Austria
- 2002 Doctor Degree of dentistry, dental school, University of Vienna, Austria

Special training in the field of dentistry

2004-2007 Postgraduate course for orthodontic in craniofacial dysfunction in the department of interdisciplinary dentistry and technology (Prof. R Slavicek abs S Sato), graduated as specialist of orthodontics from Danube University, Krems, Austria

Advanced postgraduate course for orthodontic in craniofacial dysfunction in the 2008-2010 department of interdisciplinary dentistry and technology (Prof. S Sato), Danube University, Krems, Austria Current positions Head and Professor of Center of Clinic Research, Professor of clinic dentistry in the special fields of periodontology and orthodontics, Head of section of periodontology and special output clinic of periodontal surgery and prophylaxes, Director of international teaching programs for clinic master of periodontology and implantology, and clinic master of aesthetic dentistry, University Clinic of dentistry, Medical University of Vienna **Coffee Break** 15:30-16:00 16:00-17:15 D. Singh / A. Landry / E. Piehslinger / A. Gahleitner / M. Schmid Schwap / X. Rausch-Fan Austria Morphological evaluation of TMJ articular disc position in patients treated with Controlled Mandibular Repositioning concept Abstract:

The most widely used noninvasive method of treatment is splint therapy, due to uncertainty in literature on exact method for calculation of therapeutic position for disc and condyle assembly a need of well-established study was required.

The aim of first part of this study was evaluate quantitatively calculated therapeutic position based on X-Y-Z Cartesian coordinate system of Condylography (CADIAX-Gammadental, Austria) and morphological correlation of articular disc by Magnetic Resonance Imaging (3.0T Siemens).

The present pilot study consisting of 21 internal derangements patients with reducible joint luxations undergone treatment with controlled mandibular repositioning concept based on of Dr Alain Landry's and VieSID principles at University Clinic of Dentistry, Medical University of Vienna, Austria. The position of articular disc was evaluated both in sagittal and coronal planes before and after the CMR therapy with help of magnetic resonance imaging (3.0T Siemens) at level of TMJ slice thickness of 1.1mm.

CV – Diwakar Singh

2000-2005: BDS Bachelor's in Dental Surgery Punjab, India.

2007: PG Diploma with Prof Rudolf Slavicek on function and dysfunction of Masticatory organ, TMJ Functional Diagnosis from Danube University Krems, Austria.

2010: Academic Expert for Craniofacial Functional Orthodontic, from Danube University Krems, Niederösterreich, Austria.

2014: Master of Science in Dental Science MSc (Craniofacial-Orthodontics) MEAW technique with Prof Sadao Sato for complex TMD patients from Danube University Krems, Austria.

Master Thesis for Orthodontics : Evaluation of Sequential Guidance and Clinical Attachment Level in Periodontitis Patients using 3D Scanner and CADIAS 3D under guidance of Prof Rudolf Slavicek, Prof Sadao Sato and Prof Xiaohui Rausch-Fan.

2015: PG Diploma in Controlled Mandibular Repositioning with Dr Alain Landry at Chamber of

Dental training institute of Austrian Dental Association, Vienna.
2017: - Clinical Instructor with Prof Dr Alain Landry for Controlled Mandibular Repositioning course at VieSID in cooperation with University school of Dentistry, Meduniwien.
2018: PhD candidate - N790 Applied Medial Science Medical University Vienna, Austria.
2018-present: Consultant for Temporomandibular Joint Disorders/Craniomandibular System at Dr Kokkinos Smile Clinic, Limassol, Cyprus.

2018-Present: Guest Doctor at Clinical Division of Prosthodontics, Medical University Vienna.
2018-Present: Senior Visiting Lecturer at School of Stomatology, Fujian Medical University China.
2018: Applied Prosthetic Rehabilitation at VieSID (Vienna School of Interdisciplinary Dentistry) in cooperation with University school of Dentistry, Medical University Vienna.

2018-Present: Practical Co-Instructor for advanced Condylography and fabrication of occlusal splints for complex TMD patients in Masters of Prosthetics Dentistry at University School of Dentistry.

2019-Present : Practical Instructor for Block Z-7 functional Diagnosis/ Condylography for undergraduate dental students at University School of Dentistry, Medical University Vienna. 2022:- Assistant at at clinical Research Division, University School of Dentistry. Medical University Vienna, Austria

17:15-18:00



D. Garg / D. Singh / T. Vaskovich / X. Rausch-Fan Austria

Dawn of a new Horizon stepping from conventional dentistry to functional digital dentistry

Abstract

In this preliminary study the TMD patients already treated with conventional CMR stabilizer, will be virtually repositioned using virtual CPV condylar position variator in CADIAS 3D software using the X-Y-Z Cartesian coordinate system of Condylography and later using the exocad software and 3D milled CMR stabilizer is fabricated, the first step is to verify the therapeutic position using mechanical CPM.

CV – Deepti Garg

- Guru Nanak Dev Dental College & Research Institute, Sunam, India
- Baba Farid University of Health & Sciences Faridkot, India.
- Bachelor of Dental Surgery, 30 June 2004.
- Dental License-Punjab State Dental Council Registration July 2005.
- MDSc -master's in dental sciences (Prosthetics)Medical University Vienna 2012-2014
- Advanced course on Prosthetic Rehabilitation, Medical University Vienna, VieSID, Austria.
- Seminars on TMDS and functional Occlusion, VieSID, Austria.
- Dental License registration with Austrian Dental Association.
- Diploma in Orthodontics 2021. (American Orthodontics).
- Invisalign Go Course 2021.
- PhD Student- University Dental Clinic, Medical University Vienna.
- Diploma in Esthetic Curriculum 2022. (Ongoing).

Thursday, July 21, 2022

Morning session Early preventive treatment of malocclusionsChair: S. SatoAfternoon session Complex casesChair: D. Togni

The conference program is subject to any changes of lectures and/or lecturers without prior notice.

08:30-09:30



Sadao Sato Japan

Early treatment for malocclusion: why, how and when

Abstract

Prevention of malocclusion has been a longstanding issue in the field of dentistry, which deals with the health of masticatory organs. However, the reality is that it is still far from dental care that can prevent malocclusion even based on the results of many years of research. The current preventive occlusion treatment is to take some measures at an early stage when fraud develops with an interceptive orthodontics. Even so, it has not been able to solve the essential problem of malocclusion because it is trapped only by the apparent fraud during the growing stage.

The reason for malocclusion is that the occlusion induces mandibular displacement and associated dysfunction. That is, the most important point is the abnormality of the mandibular position. The mandible of Homo Sapiens has transformed into an underlying joint with an evolutionary morphological risk of prone to deviation. In addition, the terminal plane of deciduous dentition in humans is more vertical type (class II) than that of primates (the primate shows class I).

In other words, human occlusion development has the fatefully difficult task of having to switch from the innate class II skeletal and class II occlusion to the class I skeletal and class I occlusion. If this doesn't work, it carries the risk of dysfunction. This is the reason why early preventive occlusion treatment is necessary. At this year's summer school, we will discuss these early treatment challenges.

CV – Sadao Sato

1971 Assistant, Department of Orthodontics, Kanagawa Dental College
1979 Assistant Professor, Department of Orthodontics, Kanagawa Dental College
1988 Associate Professor, Department of Orthodontics, Kanagawa Dental College
1991 President, Japanese MEAW Technic and Research Foundation
1992 Active member of EH Angle Society of Orthodontists
1996 Professor, Department of Orthodontics, Kanagawa Dental College
2002 Professor, Department of Craniofacial Growth and Development Dentistry, Division of
Orthodontics, Kanagawa Dental College
2004 Visiting Professor, Tufts University, School of Dentistry, Boston, USA
2010 Academic Dean, Kanagawa Dental University, Yokosuka, Japan
2011 Academic Dean, Shonan Junior College, Yokosuka, Japan
2014 Research Institute of Occlusion Medicine, Kanagawa Dental University, Yokosuka, Japan



A. Shirasu / M. Shirasu Japan

Early Class II & III treatment by vertical dimension control: long-term results

| | Abstract Currently, there are no accurate guidelines for the diagnosis and treatment of malocclusion in the mixed dentition stage. However, given our evolutionary background, it is important to use a vertical approach of adaptation and compensation principles to guide the mandibular position appropriately. I will present about the long-term results of treatment using the principle of adaptation and compensation for Class III and Class II skeletons in the mixed dentition stage. CV – Akiyoshi Shirasu Dental School: Dental College of Gifu (Now University of Asahi) / Gifu, Japan 1978 Postgraduate: "Oral Surgery" Prof. Nishijima/ University of Okayama/ Okayama, Japan (1978-1981) Private Dental Clinic in Okayama/ Okayama, Japan (1981-2009) Med.Sc. Degree: Prof. Mori/ University of Okayama/ Okayama, Japan 1987 Private Dental Clinic and Office (SHIRASU Dental Office) in Okayama/ Okayama, Japan since 2009 CV – Masayoshi Shirasu 2005. Graduation from Nagasaki university school of dentistry 2010. Received Ph.D. (Kanagawa dental university, department of Orthodontics, Prof. Sadao Sato) 2010- working in the private office "SHIRASU DENTAL OFFICE" Okayama, Japan | |
|-------------|--|--|
| 10:30-11:00 | Coffee break | |
| 11:00-11:45 | Oleksandr Kobylyanskyy Ukraine Class II Overlay approach, Success and failure. | |

Abstract

Class II malocclusion is the most common occlusal disorder and in most cases is due to insufficient development of the mandible. Its formation is due to insufficient adaptation of the lower jaw during the period of growth of the child.

Adaptation is an integral part of our life. By understanding the adaptation processes, the factors that influence it, we can effectively diagnose, prevent and treat skeletal types of malocclusion. The technique of occlusal overlays is based on the natural principles of adaptation and mandible growth. This method makes it possible to correct and prevent the development of skeletal forms of malocclusion in an exclusively natural way without the use of traditional removable and functional orthodontic appliances.

Using occlusal overlay you can balance the occlusion, increase the vertical dimension of the occlusion, create protrusive guidance, retrusive control, which allows to achieve functional and subsequent structural adaptation of the mandible to the therapeutic position to prevent the

development or correction of skeletal malocclusions. Therapeutic position of the mandible, the number of overlays, their height, material, design of the occlusal surface, age of the patient, etc. are very important for the effectiveness of this method of orthodontic treatment.

The use of occlusal overlays is very effective in the correction of skeletal Class III malocclusion, mandibular lateral displacement (MLD), but in the treatment of Class II or a combination of sagittal and transverse occlusal disorders, the success rate is slightly lower. Anterior mandibular adaptation is influenced not only by occlusion, but also by other factors such as stress, bruxism, mouth breathing, abnormal swallowing, orofacial muscle imbalance, posture, and bad habits. In the orthodontic treatment of children, all these factors should be taken into account to increase efficiency. Successful and failed cases of treatment, as well as the conditions that affected it, different types of occlusal overlays and methods of their manufacture will be presented in this lecture.

CV – Oleksandr Kobylyanskyy

- 2002-2007 study at Kyiv Medical University (DDS);
- 2007-2015 internship, specialization of orthodontics, of prosthodontics, of organization and management of health care at Shupik National Medical Academy of Postgraduate Education (Kyiv, Ukraine);
- Since 2014 Doctoral Program of Applied Medical Science N790 (Vienna Medical University, Austria);
- 2015 Doctoral Dissertation study «Investigation with 3-D technology in periodontal hard and soft tissue following orthodontic treatment» started at Vienna Medical University;

Occupation and Career:

- 2015 Co-Founder of the Functional Orthodontics Medical Center;
- 2015-2019 Chief Medical Officer of the Functional Orthodontics Medical Center;
- 2018 Founder of the International School of Progressive Orthodontists (ISPO).
- Since 2019 Chief Medical Officer of Status Dental Studio Medical Center;

11:45-12:30



Roberto Velasquez Colombia

Early Treatment of MLD Malocclusion

Abstract

Previous 3D CBCT studies indicate an MLD malocclusion develops when the mandible adapts to a left-right difference in vertical height and then transitions to a skeletal change. From the point of view of the anterior-posterior relationship, the shifted side has a lower vertical height and a mandibular distal occlusion. Conversely, the non-shifted side has a higher vertical height and a mandibular mesial occlusion. MLD malocclusion is when the difference in the vertical occlusion dimension induces mandibular displacement and, in many cases, it is associated with dysfunction. From these findings, an MLD can be treated in an early stage by differentially adjusting the vertical dimension to establish a correct mandibular position.

We can improve the mandibular position by increasing the occlusal height on the shifted inside and decreasing the vertical dimension on the non-shifted side. MLD malocclusion should be treated as a biological relationship between jaws and teeth that includes the dynamic function of the craniofacial complex. It is essential to improve the occlusal height to restore the dynamic balance of the maxillofacial structure. Furthermore, it is crucial to find the balance shift of the maxillofacial system and treat the condition at an early stage of occlusal development. At the same time, the dynamic mechanism of the craniofacial complex is more flexible and adaptable to change than at a later age. Therefore, preventive occlusal therapy during growth and development should be given, as the body manages the shape and function of the oral cavity.
 CV – Roberto Velasquez

 1985: Doctor of Dental Medicine: Universidad de Cartagena - Colombia
 1995: Masters of Science in Orthodontics and Dentofacial Orthopedics: Universidad Complutense de Madrid, Spain
 2017: Ph.D.: Kanagawa Dental University, Yokosuka, Japan
 2016: Member, E.H. Angle Society of Orthodontics North Atlantic Component
 2017: IDEA (Interdisciplinary Dental Education Academy), Faculty, CA, USA

 12:30-13:00

13:00-14:00 Lunch break

14:00-15:00



Paola Mancia Italy

A PATIENT WITH ARNOLD-CHIARI AND EAGLE SYNDROMS

In memory of Dr G. Chiogna

Abstract

This case report describes the "in progress" orthodontic treatment of an adult female patient with a class II and MLD malocclusion, TMJ disfunction, affected also by the neurological Arnold-Chiari syndrome and the Eagle's sindrome which is a condition involving the head and neck region rarely identify anatomically and poorly understood clinically.

The patient presented numerous symptoms associated with the two syndroms like vertigo, tinnitus, headaches, nistagmus, cervico-facial pain, dysphagia, muscles weakness but also TMJ pain.

Most interesting in this case is how the orthodontic treatment associated with a physiotherapy treatment, in her case using a very gentle approach, are resulting in a tangible improvement of the symptoms. Moreover, every change in mandibular position and occlusion have a positive functional influence on the surrounding anatomical structures.

CV – Paola Mancia

Paola Mancia first graduated in Dentistry through "Tor Vergata" University in Roma. In 2009, she attended a postgraduate course on "Function and disfunction of the masticatory organ", at Danube University, Krems, with Prof. Slavicek, and studied further with Prof. Sato attending the VieSID course "Orthodontics in craniomandibular dysfunction". She lectures in various courses and actively participates in congresses and workshops. In her private office in Rome, Italy, she focuses on the diagnosis and orthodontic rehabilitation of dysfunction patients.

| 15:00–16:00 | Ian Tester Canada Sequencing of a complex case |
|-------------|---|
| | Abstract This presentation will highlight two complex cases using VieSID concepts. The first case reviews a reconstruction that is done at an increased vertical dimension. The critical phase of provisionalization will be emphasized. An unfortunate twist that occurs after case completion will demonstrate the importance of good records. The second half of the presentation follows a TMD case originally restored using VieSID concepts 30 years ago. Follow up diagnostics at various intervals will be discussed. |
| | CV – Ian Tester Ian W. Tester is a Fellow and Past President of the Canadian Academy of Restorative Dentistry and Prosthodontics (CARDP) and a member of numerous dental organizations including the American Academy of Restorative Dentistry (AARD). He practices general dentistry in St. Catharines with a focus on complex, dysfunctional patients which he treats using interdisciplinary approaches. Under Prof Slavicek guidance, he obtained a Master Degree in Dental Sciences at Donau University in Krems Austria, in 2004. Since then, he has been lecturing internationally on complex treatment planning, including functional diagnostic and treatment of dysfunction based on occlusal reconstruction. |
| 16:00-16:30 | Coffee Break |
| 16:30-17:30 | Natalia Lopukhova Russia Non-surgical treatment of bilateral condyle fractures |
| | Abstract Mandibular fractures are extremely frequent in facial traumas, and 19-52% involve the condyles. Choosing between open and non-surgical (conservative) treatment of condyle fracture is being discussed till now. The absolute indications for open treatment of condylar fractures are in |

bilateral fractures' cases.

We present the clinical outcome of the treatment of a patient after an injury resulting from a fall from a bicycle. A peculiarity of the clinical situation: non-growing patient, orthodontic treatment with the of four premolars extraction in history, TMJ dysfunction on the right side. A bilateral fracture of the condylar processes was accompanied by trauma of soft tissues, several teeth, and a fracture of the alveolar process of the upper jaw.

Treatment included initial functional analysis, replacement of emergency splint with bracket system, healing time, 3rd molars extraction, orthodontic treatment by the MEAW technic and finalization with molars anatomy reconstruction.

The Prof. Slavicek's and Prof. Sato's treatment approach shows a good long-term result in the case of non-growing patient with both sides condyle fractures.

The purpose of my presentation is to illustrate the full sequence and the result of the VieSID's concept using.

CV

1985-1990:Dental student at the Kalinin State Medical Institute (Russia)1990-1992:Two years' internship in prosthodontics at the Prosthodontic department ofDental faculty of the KSMI

1992-1995:Postgraduate course in orthodontics at the Tver State Medical Academy (Russia)2002:Internship at the "Roth-Williams Center for Functional Occlusion" (Spain)

2002: Laureate of the all-Russia professional competition in prosthodontics

2008-2010: Postgraduate course at the Biotechnology and Interdisciplinary Department of Danube University (Krems, Austria). Course of prof. Rudolf Slavicek. Awarded Master of Science degree. Theme of Master thesis: "Estimation of the difference between nocturnal scheme of bruxing and diurnal parafunctional activity of human"

2010-2011: Prof. S. Sato VIESID Continuum Course "Orthodontics in Craniofacial Dysfunctions"

2016-2017:VieSID Orthodontics Prof. Sato One-Year Refresher Course 2016Since 2008 till now:Main doctor of the "Denta-Luxe" private Dental Center (Tver) andDirector of the "Denta-Luxe" Dental Education Center

Friday, July 22, 2022

Morning session **Bone Physiology** Chair: D. Storino Afternoon session **Bone Physiology / Modern-day materials for clinical**

success

Chair: D. Storino / I. Tester

The conference program is subject to any changes of lectures and/or lecturers without prior notice.

09:00-10:15



Jill Helms USA

Bone physiology of the craniomandibular system. Part I

Abstract

For those interested in skeletal biology, the appendicular and axial skeletons hold a distinct appeal for analysis, as their elements exhibit an uncomplicated anatomy. The craniomandibular skeleton, on the other hand, is composed of an often-bewildering assortment of neural crest- and mesoderm-derived cartilages and bones that have been highly modified during evolution. This makes comparisons among divergent species a challenge. Such anatomical complexity and embryonic amalgamations may initially diminish one's enthusiasm for understanding how the head skeleton is generated and undergoes repair.

As it turns out, the molecular mechanisms inducing chondrogenesis and osteogenesis in cranial neural crest cells, which produce the facial and jaw skeleton, are distinct from those operating in mesodermal cells, which produce the remainder of the skeleton. Thus, our ability to understand, prevent, or at least mitigate cranial skeletal anomalies, and to promote cranial skeletal repair, depends upon understanding these cranial-specific pathways.

CV – Jill Helms

1996-2000 Assistant Professor University of California at San Francisco
2000-2004 Associate Professor University of California at San Francisco
2004-2010 Associate Professor Stanford University
2010-current Professor Stanford University
2017-2019 Chief Scientific Officer Ankasa Regenerative Therapeutics, Inc
2019-current Co-founder and Advisor Ankasa Regenerative Therapeutics, Inc

RECENT POSITIONS and APPOINTMENTS
2018-current Academy of Osteology lecturer
2018-2020 AO CMF R&D Commission
2020- Present AO Technology Transfer Board Member
2021- Present Editorial board, Journal of Clinical Periodontology
2021- Present Editorial board, Journal of Dental Research



the pathogenesis of secondary osteoporosis, osteoporosis in men, the regulation of bone resorption and the development and characterization of *in vivo* models for bone research. Based upon his broad experimental and clinical research experience he was among the first to delineate interactions between bone and the immune system, a field now termed "osteoimmunology". Peter Pietschmann has published over 260 papers in peer reviewed journals, 33 book chapters and edited three books. According to Scopus his H-index is 45.

14:00-14:30 *Round Table*

14:30-15:00 Coffee break

15:00-16:00



Taiseer Sulaiman USA

Materials in Digital Dentistry...Are We There Yet?

Abstract

CAD/CAM in dentistry is constantly growing becoming a user- and patient-friendly technology and service using intraoral scanners and laboratory/chairside milling units to manufacture dental restorations and appliances from multiple materials including wax, metals, composite resins, and ceramics. Properties of these materials may vary when compared to restorations prepared from conventional and additive manufacturing methods. Understanding the differences in these properties is important for material and fabrication method selection. Additive manufacturing is becoming an alternative to subtractive manufacturing in many applications. However, chemical composition, mechanical and physical properties of these materials are still lacking. 3D printed materials require a considerable amount of research and time to prove its clinical efficacy.

Objectives:

- Classify the spectrum of CAD/CAM materials that are available to the clinician.

- Define the mechanical and optical properties of CADCAM materials and how it compares to those of the natural tooth structure.

- Understanding criteria for material selection to optimize clinical longevity of various CAD/CAM materials.

CV

Taiseer Sulaiman is a Tenured Associate Professor and the Director of the Advanced Operative Dentistry and Biomaterials Research at the Adams School of Dentistry, University of North Carolina at Chapel Hill where he earned his clinical certificate in Operative Dentistry and his PhD in Dental Materials from the Department of Prosthetic Dentistry and Biomaterial Sciences from the University of Turku in Finland in collaboration with the Department of Operative Dentistry at UNC. Dr. Sulaiman is a wet-handed clinician, and a researcher who is passionate about bridging the gap between dental research and clinical application. Dr. Sulaiman's research focus is on dental ceramics, adhesion, cements, color and appearance in dentistry, and biomimetics. He has published over 80 peer-reviewed articles, abstracts, and book chapters. He is a member of many academies including the Academy of Operative Dentistry (where he serves as councilor to the academy), the Society of Color and Appearance in Dentistry, IADR/AADR, and the American Dental Association. He has lectured on numerous national and international stages and serves as a reviewer for many peer-reviewed journals.

16:00-17:00

19:30



Taiseer Sulaiman USA

Ceramic Onlays...Contemporary Guidelines for Clinical Success

Abstract

Recent restorative procedures have become increasingly driven by minimal invasive practices. With the availability of durable adhesive systems and ceramic materials with enhanced mechanical properties, clinicians are now capable of challenging traditional guidelines that instruct on the indications for preparation/restoration design with the goal of conserving as much tooth structure as possible. Guidelines for the modified and minimally invasive partial coverage restorations are not clear.

Objectives:

- To present an in-depth overview of the materials available for ceramic partial coverage restorations.

- Describe tooth preparation guidelines that can optimize restoration longevity.

- Learn about adhesive systems and steps required to maximize bonding ability of these restorations.

- Review the literature and determine clinical-based evidence in support of partial coverage restorations.



Get-together-Evening at Heuriger Fuhrgassl Huber (Neustift am Walde 68, 1190 Vienna) has to be booked extra



Saturday, July 23, 2022

Morning session **Condylography as interdisciplinary diagnostic tool** Chair: A. Nagy

Afternoon session Temporary Overlays Guided Orthodontics - ToGo

Chair: C. Basili

The conference program is subject to any changes of lectures and/or lecturers without prior notice.

08:45-09:30



Kim Parlett Canada

Condylography: Facts & Fiction

Abstract

A careful look at the facts and the fiction.

A review of the literature from 1988- to the present indicates a significant body of work for "jaw tracking" We define condylography as "axial pantography" and as such Condylography is not a" jaw tracking" device but a condylar axis recorder. The presentation will present a summary of the research specific to condylography and provide an evidence based opinion of the current status of condylography as a diagnostic tool for joint pathology and as an instrument for recording functional kinematics of the stomatognathic system. The presentation will provide attendees with some clarity regarding; How, when and why condylography can be used.

CV – Kim Parlett

Kim Parlett received his DDS degree from the University of Toronto, and a Masters degree in Dental Science from Donau University, Austria, in 2004. He has lectured to study clubs and scientific meetings in Canada and the United States on occlusion and TMD. He has published several papers on the topic. He maintains a private practice in Bracebridge, Ontario, Canada with emphasis on functional rehabilitation of patients with occlusal and TMD related disorders.

He was a past president of the International Dental Study Club, the Canadian Academy of Restorative Dentistry & Prosthodontics. He is an active member of the American Equilibration Society. He is an International faculty member of the Vienna School of Interdisciplinary Dentistry & VieSID Canada. He is one of five Canadians who hold active membership in the prestigious American Academy of Restorative Dentistry. He has been inducted as a fellow into several honorary Academies including the International College of Dentists ,the American College of Dentists and the Pierre Fauchard Academy.

09:30-10:30



Sadao Sato Japan

Concept of Condylography in the diagnosis and treatment of TMD

Abstract

The mandibular position is the most important factor in occlusion treatment, as it is the starting point of treatment. Since the concept of temporomandibular disorders (TMD) was first proposed, there has been much discussion about mandibular position, but there is still a lack of consensus in many areas, which causes confusion in daily dental practice. It is well known that in the past, gnathology promoted occlusal treatment with centric relation as the goal of treatment, but now the definition of centric relation itself has been greatly modified, shifting from the former mechanical or morphological concept to a more physiological one.

In order to obtain the physiological mandibular position clinically, it is necessary to accurately reproduce the patient's mandibular position on the articulator and to determine the physiological mandibular position. In the case of taking bite based on this concept, it is necessary to check whether the mandibular position obtained has no problem for occlusal reconstruction, and to have a means to determine the physiological mandibular position (PHP). An objective evaluation is needed to determine the target mandibular position (ThP), taking into account the various factors that affect the mandibular position.

The condylograph is used for this purpose.

Since the ultimate goal of diagnosing and reconstructing occlusion is to perfect occlusion in the physiological mandibular position, the condylograph (Cadiax, Condylograph) is important in determining the patient's current mandibular position and whether it is a physiological or nonphysiological position (DRP). If the mandibular reference position (RP) is determined to be in a non-physiological position (DRP) by condylograph and imaging studies, the physiological mandibular position (PRP) must be diagnostically determined.

CV – Sadao Sato

1971 Assistant, Department of Orthodontics, Kanagawa Dental College
1979 Assistant Professor, Department of Orthodontics, Kanagawa Dental College
1988 Associate Professor, Department of Orthodontics, Kanagawa Dental College
1991 President, Japanese MEAW Technic and Research Foundation
1992 Active member of EH Angle Society of Orthodontists
1996 Professor, Department of Orthodontics, Kanagawa Dental College
2002 Professor, Department of Craniofacial Growth and Development Dentistry, Division of
Orthodontics, Kanagawa Dental College
2004 Visiting Professor, Tufts University, School of Dentistry, Boston, USA
2010 Academic Dean, Kanagawa Dental University, Yokosuka, Japan
2014 Research Institute of Occlusion Medicine, Kanagawa Dental University, Yokosuka, Japan

11:00-12:00



Agnieszka Szygenda Poland

Clinical instrumental analysis in interdisciplinary dentistry

Abstract

Condylography enables clinicians to diagnose TMJ. In addition to curves timing, characteristic, quantity and quality, condylography gives us opportunity to perform instrumental analysis of mounted casts in RP position for better understanding functions of TMJ.

In my lecture I will describe static and dynamic analysis, CPM (condyle position measurement) and evaluation of dynamic occlusion frame and occlusal plane variations in treatment planning.

CV – Agnieszka Szygenda

Agnieszka Szygenda graduated with honors from the Medical University of Poznań in 1997. She is a specialist in General Dentistry and a member of Polish Endodontic Society, an active member of Polish Academy of Aesthetic Dentistry PASE.

She completed courses in various fields of dentistry - implantology, periodontology, endodontic, prosthetic.

She started her VieSID education in 2011 taking part in Curriculum "Gnathology and Occlusion in Interdisciplinary Dentistry" and until now she has attended advanced courses: "Therapy and Treatment Concepts" (2011-2013), "Orthognatodontic Clinical Course" (2013-2016) and "One-year refresher course "(2016-2017). She also completed Curriculum "Gnathology and Occlusion in Interdisciplinary Dentistry with focus on Dental Laboratory" (2013) and "VieSID Clubbing for Science" (2014 and 2015)

Agnieszka Szygenda has been running her practice in Poznań since 1998, where, together with her team, she comprehensively treats patients using a multidisciplinary approach according to the concept of prof. Rudolf Slavicek and prof. Sadao Sato.

In 2016 she became VieSID lecturer and started Polish edition of VieSID Curriculum (11 editions till now) and VieSID Prosthodontic Therapy Continuum "Applied Rehabilitation: Function & Esthetics" (2018-2019) and (2019-2021).

12:00-13:00 Lunch break





Miguel Assis Portugal

The Pitfalls of MEAW Technique and Occlusal Plane control

Abstract

The Multiloop Edgewise Arch Wire (MEAW) is a great tool. However, it has also a few downsides. It was created by Young Kim in 1967 to treat severe anterior open bite malocclusions. From then on, it has evolved to treat all other kinds of malocclusions, since it can change the occlusal plane inclination and also upright lower molars, something that traditional orthodontics with straight wire cannot. MEAW has a high degree of three-dimensional individual tooth control, perfect as a

finishing tool. On the other hand, it causes mostly dentoalveolar changes without significantly influencing the skeletal structures.

Occlusal Plane inclination is closely related to malocclusion and mandible position. So, the ability to control occlusal plane is key when treating malocclusion. There is a general misunderstanding regarding Occlusal Plane since there are more than one Occlusal Plane. The questions are: which Occlusal Plane serves what purpose? and which ones should be changed in each patient?

CV – Miguel Assis

Miguel Assis is a highly specialized orthodontist practicing the concepts of Interdisciplinary Dentistry while educating himself thorugh postgraduate courses on advanced orthodontic techniques and function and dysfunction of the masticatory organ at various Schools, including a MSc in Prosthodontics at the Medical University of Vienna, the Kanagawa Dental University, Japan, and the Santiago de Compostela University. He also attended the VieSID courses before becoming a VieSID instructor himself. His expertise includes the use of condylography as monitoring tool suppoorting the diagnostic assessment.

13:30-15:00



Alejandra Londoño / Miguel Assis / David Ovando / Nelson Oppermann

The ToGo approach. Temporary Overlays Guided Orthodontics / Part I

Abstract

Orthodontics is a very broad word for tooth movement. There are many techniques and different ways for moving teeth. 120 years ago, Edward Angle, the "father of orthodontics", did the best he could with gold wires, in a time where metallurgy and radiology were still giving their first steps. In the 1950s cephalometries stepped in and skeletal problems started to be diagnosed. However, nowadays still very few "orthodontic techniques" provide a true skeletal change, most of them just align teeth without thinking of the possibility to change mandible position.

The mandible can be repositioned within its physiologic limits after a thorough and systematic diagnostic. This new Therapeutic Position (TP) is individual to each patient and is maintained by Functional Occlusion taking advantage of special morphologic features of the occlusal surfaces, just like Nature does in normal growing Skeletal Class I subjects.

The Temporary Overlays Guided Orthodontics (TO GO) are a tool to achieve that goal: maintain TP while the remaining teeth are being moved orthodontically to their proper position in space, in 3 dimensions. The advantages are: proper skeletal treatment, less treatment time and TMD treatment, all at the same time.

CV – Alejandra Londoño

Alejandra Londoño is an orthodontist specialized in the functional analysis of the masticatory system and condylography. Her experience

in the topic derives from the advanced studies she conducted, her clinical practice and research activities. She first graduted and specialied in Orthodontics in Colombia, and then obtained an MSc in Prosthodontics, Medical University of Vienna. She successfully conducted further postgraduate studies at Danube University, Austria and Kanagawa Dental University, Japan. She attended the VieSID courses before joining the VieSID team of instructors.

CV – David Ovando

Dental Surgeon Graduated from the University of San Carlos of Guatemala, 1990. Postgraduate in Oral Rehabilitation and Function and Dysfunction of the Masticatory Organ, University of Vienna, Austria 1992-1993.

Postgraduate in Oral Rehabilitation, with emphasis on Aesthetics and Function, University of San Pablo, Guatemala.

Professor of Occlusion at the University of San Carlos in Guatemala and Mariano Gálvez University.

CV – Nelson Oppermann

Dr. Nelson Oppermann is an Orthodontist with more than thirty years of experience, been involved with the Bioprogressive, Sectional Mechanics and MEAW Studies. Recently, together to a team of experts, developed the temporary overlays guided orthodontics concept – TOGO – based on Prof. Rudolf Slavicek foundations.

Academically, is involved as adjunct professor at the Department of Orthodontics at the University of Illinois at Chicago – UIC – USA for more than ten years and is currently involved with studies related to the interrelation between occlusion, craniomandibular growth and mandible repositioning, being published articles on important dentistry journals. Apart of those attributions Dr. Oppermann is an active and enthusiastic professor and lecturer, being visited many countries for teaching, with articles published based on physiological treatment concepts.

15:00-15:30 Coffee Break



Sunday, July 24, 2022

Morning session Lunch session Afternoon session

Table Clinics Poster presentation VieSID Research

Chair: A. Manière

Chair: H. Proenca

The conference program is subject to any changes of lectures and/or lecturers without prior notice.

09:00-09:50 10:00-10:50 11:00-11:50



D. Singh / T. Vaskovich / D. Garg Austria Functional digital workflow for TMD patients

Abstract

Since the recent advancements in digital dentistry and in era of modern digital Dentistry, one cannot forget the function, which is the integral part of our stomatognathic and cybernetic system. Controlled Mandibular Repositioning (CMR) concept (Dr. Alain Landry, Quebec, Canada) helps us to treat different types of TMD patients and to reposition the mandibular condyles in such a way to recapture the displaced disc based on X-Y-Z Cartesian coordinate of Condylography using Condylar position variator (CPV) the best possible way to calculate therapeutic position in al the 3 planes.

Once the therapeutic position is calculated then with help of dental technician colleague using digital lab workflow on virtual CADIAS 3D and exocad software's a 3D milled CMR stabilizer.

CV – Diwakar Singh

2000-2005: BDS Bachelor's in Dental Surgery Punjab, India.

2007: PG Diploma with Prof Rudolf Slavicek on function and dysfunction of Masticatory organ, TMJ Functional Diagnosis from Danube University Krems, Austria.

2010: Academic Expert for Craniofacial Functional Orthodontic, from Danube University Krems, Niederösterreich, Austria.

2014: Master of Science in Dental Science MSc (Craniofacial-Orthodontics) MEAW technique with Prof Sadao Sato for complex TMD patients from Danube University Krems, Austria.

Master Thesis for Orthodontics : Evaluation of Sequential Guidance and Clinical Attachment Level in Periodontitis Patients using 3D Scanner and CADIAS 3D under guidance of Prof Rudolf Slavicek, Prof Sadao Sato and Prof Xiaohui Rausch-Fan.

2015: PG Diploma in Controlled Mandibular Repositioning with Dr Alain Landry at Chamber of Dental training institute of Austrian Dental Association, Vienna.

2017: - Clinical Instructor with Prof Dr Alain Landry for Controlled Mandibular Repositioning course at VieSID in cooperation with University school of Dentistry, Meduniwien.

2018: PhD candidate - N790 Applied Medial Science Medical University Vienna, Austria.
2018-present: Consultant for Temporomandibular Joint Disorders/Craniomandibular System at Dr Kokkinos Smile Clinic, Limassol, Cyprus.

2018-Present: Guest Doctor at Clinical Division of Prosthodontics, Medical University Vienna.
2018-Present: Senior Visiting Lecturer at School of Stomatology, Fujian Medical University China.
2018: Applied Prosthetic Rehabilitation at VieSID (Vienna School of Interdisciplinary Dentistry) in cooperation with University school of Dentistry, Medical University Vienna.

2018-Present: Practical Co-Instructor for advanced Condylography and fabrication of occlusal splints for complex TMD patients in Masters of Prosthetics Dentistry at University School of Dentistry.

2019-Present : Practical Instructor for Block Z-7 functional Diagnosis/ Condylography for undergraduate dental students at University School of Dentistry, Medical University Vienna. 2022:- Assistant at at clinical Research Division, University School of Dentistry. Medical University Vienna, Austria

09:00-09:50 10:00-10:50 11:00-11:50



Alejandra Londoño / Miguel Assis / David Ovando / Nelson Oppermann

Practical aspects of the Temporary Overlays Guided Orthodontics - ToGo approach

Abstract

The application of the TOGOs requires an extensive diagnostics process. After a comprehensive treatment plan the clinician is able to design and construct the ideal overlays to each case demands.

During the table clinic presentation, the participant will be able to understand all steps needed to build up a temporary overlay guided orthodontics case. It will be displayed a case demo with 3D printed models from ICP to RP to TP and with the overlays placed AND furthermore it will be demonstrated, with a present patient, a full case study with the final result placed in mouth.

CV – Alejandra Londoño

Alejandra Londoño is an orthodontist specialized in the functional analysis of the masticatory system and condylography. Her experience

in the topic derives from the advanced studies she conducted, her clinical practice and research activities. She first graduted and specialied in Orthodontics in Colombia, and then obtained an MSc in Prosthodontics, Medical University of Vienna. She successfully conducted further postgraduate studies at Danube University, Austria and Kanagawa Dental University, Japan. She attended the VieSID courses before joining the VieSID team of instructors.

CV – Miguel Assis

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CV – David Ovando

Dental Surgeon Graduated from the University of San Carlos of Guatemala, 1990. Postgraduate in Oral Rehabilitation and Function and Dysfunction of the Masticatory Organ, University of Vienna, Austria 1992-1993.

Postgraduate in Oral Rehabilitation, with emphasis on Aesthetics and Function, University of San Pablo, Guatemala.

Professor of Occlusion at the University of San Carlos in Guatemala and Mariano Gálvez University.

CV – Nelson Oppermann

Dr. Nelson Oppermann is an Orthodontist with more than thirty years of experience, been involved with the Bioprogressive, Sectional Mechanics and MEAW Studies. Recently, together to a team of experts, developed the temporary overlays guided orthodontics concept – TOGO – based on Prof. Rudolf Slavicek foundations.

Academically, is involved as adjunct professor at the Department of Orthodontics at the University of Illinois at Chicago – UIC – USA for more than ten years and is currently involved with studies related to the interrelation between occlusion, craniomandibular growth and mandible repositioning, being published articles on important dentistry journals. Apart of those attributions Dr. Oppermann is an active and enthusiastic professor and lecturer, being visited many countries for teaching, with articles published based on physiological treatment concepts.

09:00-09:50 10:00-10:50 11:00-11:50



Emilio Zanatta Brazil

Occlusogram: wax and digital

Abstract

Purpose: This case report was performed to determine the visual equivalence between the OccluSense[®], Digital Occlusogram Technique (DOT) in comparison with the wax, Traditional Occlusogram Technique (TOT).

Materials and methods: Blue wax was used for TOT, Data capture for DOT was used with the electronic sensor of the OccluSense[®] device (DR. Jean Bausch Gmbh & Co. KG).

This case was applied to adult patient in different mandibular positions: 1-Reference position (RP) 2- Intercuspal position (ICP) 3- Mediotrusion right (MR) 4- Mediotrusion left (ML) 5- Protrusion (P) 6- Retrusion (R) 7-Bruxism (B). For the interpretation of the occlusogram (TOT) result, the wax was placed on a negatoscope, in the same position as it is removed from the mouth without any rotation of the wax position, and thus photographed from top to bottom. For the interpretation of the occlusogram (DOT) result, the data recorded on the iPad (2D/3D) were adjusted to the timeline (horizontal) and the filter (vertical) and made a screenshot. The evaluation of visual coincidence between the techniques was performed in the Keynote app by capturing this DOT image and superimposed with reduced opacity on the wax image.

Results: The visual coincidence of the occlusogram was possible to be established between the two techniques, always associating with the clinical information.

Conclusions: 1- The occlusogram techniques (TOT and DOT) showed relevant information on mandible position/teeth occlusal contact. 2- Doing the occlusogram technique with wax sheet reduces, the time for the learning curve of analyzing data recorded with the OccluSense[®] device. 3- Combining TOT and DOT techniques it is possible to quantify the excursion of occlusal contacts between teeth during mandibular movements. 4- Static and dynamic mandible position and the level of the occlusal contacts pressure at a given time, were recorded for immediate use or a follow-up as a relevant additional information with the DOT.

CV – Emilio Zanatta **Undergraduate Studies:** Santos Faculty of Dentistry 1978 to 1981 Working in private dental office since 1982 Specialization: Specialization in Prosthodontics. Institution: Santos Faculty of Dentistry - 1983 to 1985. Graduate Studies – Master of Science – MSc. Field: Bucomaxillofacial Prothesis Institution: FOSJC/UNESP - School of Dentistry - São José dos Campos, 1990 to 1994. Graduate Studies - Philosopher's Degree - PhD. Field: Dental Materials. Institution: USP - University of São Paulo. 1997 to 2000. Academic Titles: **Prosthodontics Specialist** MSc in Dentistry - Buco-maxilo-facial prostheses, PhD in Dentistry - Dental Materials.

09:00-09:50 10:00-10:50 11:00-11:50



Martina Schmid-Schwap Austria

TMD – clinical interpretation of MRI findings

Abstract

Magnetic resonance imaging (MRI) is the "golden standard" for analysis of anatomy and pathology of the temporomandibular joint - especially in diagnosis of soft tissues and even for detecting of effusion.

In this table clinics we will discuss MRI diagnosis of patient cases with temporomandibular dysfunction syndrome and implications for therapy

CV – Martina Schmid-Schwap

Venia docendi for dental medicine, Deputy director of the curriculum for dental studies, associate Professor at the Department of Prosthodontics, Curriculum coordinator, Chief of the Outpatient Dental Clinic for Temporomandibular Disorders.

Laureate of the Rudolf-Slavicek-Award 2008, 2010 and 2015 (Österreichische Gesellschaft für Zahn-, Mund- und Kieferheilkunde) and the Austrian Dental Award 2012 and 2013, several publications, lectures, reviewer for several dental journals, member of several scientific congress committees and dental associations, Editorial Board Member of several dental journals, volunteer member of teaching faculty at KinderuniWien.

12:00-13:00 LUNCH & LEARN – **POSTER PRESENTATIONS & DISCUSSIONS** *details at the end of this day's lectures*

13:00-13:15 **Poster Awards**

13:15-13:45



J.D. Orthlieb / M.Guillaume / C.Baillif / E. Casazza France

Cephalometric analysis of the inclination of palatal plane

Abstract

The palatal plane is not frequently used in cephalometric analyses, although, not only is it defined by precise anatomical landmarks that are easily identifiable, but it seems also strongly linked to certain facial skeletal typologies in the vertical hypodivergent or hyperdivergent direction. First, a literature review was conducted by two operators [CE1] calibrated on the PubMed database, including English-language articles published from January 1992 to April 2022. Of the 207 articles initially selected, 12 were finally retained. These articles presented great diversity in terms of design, methodology, population studied, which made their comparison difficult. A qualitative analysis of these articles was therefore carried out using the PICOS tool.

This literature review therefore confirms that the palatal plane is only very rarely used in studies for cephalometric analyses. It therefore seems interesting to propose a protocol aimed at specifically studying the orientation of the palatal plane and its relationship with other cephalometric determinants.

A retrospective statistical study of 400 teleradiographs of natural subjects was conducted. The data was collected consecutively from documents that were previously prescribed to patients with natural dentition by other practitioners for various reasons. The study was validated by the Ethics Committee of the Latimone University Hospital Center.

The inclination of the palatal plane was measured related to the Selion-Nasion plane, to the mandibular plane, to the axio-orbital plane. The objective of this study is to look for links between the inclination of the palatal plane and the vertical dimension of occlusion, the inclination of the occlusal plane, the angle of the cranial base. Some mean values and regression link will be demonstrated. They could be a way to improve therapeutical decision in orthodontics or prosthodontics.

CV

Faculty of Dentistry of Marseille - Aix-Marseille University - France Doctor of Dental Science, MSS, PhD, Full Professor, past-head of the Oral Functions&Dysfunctions department.

Past- President of "International Academy of Advanced Interdisciplinary Dentistry". Author of 154 publications, 7 books.

13:45-14:15



Elod Úry / T. Haberl / C. Fornai / C. Slavicek Hungary/Austria

Clinical consequences of a wrong terminal hinge axis

Abstract

The need to use the mandibular hinge axis for dental treatment is not universally recognized. Identifying the terminal hinge axis (THA) requires dedicated equipment, such as a kinematic facebow, operated by highly trained practitioners. Instead, most clinicians employ anatomic facebows, which use average hinge axis values, sometimes leading to severe errors. However, the frequently used arbitrary articulation of the analog or virtual models might increase the potential bias dramatically. Therefore, we conducted an experimental study to demonstrate the clinical consequences of using the wrong THA while performing dental rehabilitation requiring a change in vertical dimensions.

We considered adult patients with complete dentition up to the second molar. First, the THA was determined using a CADIAX[®] 4 kinematic device. Later, surface models of the dental casts, in their maximal intercuspal position (ICP), were imported into the CADIAS 3D software. THA mounted ICP virtual models were opened by an incisal pin of 4 mm, simulating a thin resin interocclusal record (IR). A second simulation was also performed opening the models 8 mm to represent a wax record. Next, the models were translated to 24 different positions to simulate as many wrong hinge axis positions for each IR simulation. The wrong positions were identified along three circles of 5-, 10-, and 15-mm radii, respectively. The first position along each circle were posteriorly located along the terminal axis-orbital plane, and the rest were equiangularly distributed in a clockwise direction. The models were then closed using the wrong axes until at least one premolar, and molar contact was reached in each quadrant, representing a stable occlusion Patients with a regular and symmetric posterior occlusion were preselected to ease interpretation of the outcomes. Afterward, the amount of necessary occlusal adjustments defined by the interpenetrating virtual surfaces in the different positions were quantified as volumes.

Our results demonstrated that using wrong THA positions introduced a bias in the spatial alignment of the articulated models. Thus, a clinician would have to equilibrate the occlusion by increasing quantities of enamel as the distance from THA increases. Although figures varied based on the occlusal characteristics of the patients, wrong THAs located in the superior, antero-superior, anterior, and antero-inferior positions caused unwanted frontal contacts. Instead, posterior and postero-superior wrong axes caused mostly rear collisions of the surfaces, generating higher intersecting volumes of the posterior teeth. Raising the bite 8 mm resulted in a more significant overlap of the models anteriorly, generating volumes 3 to 4 times higher than those observed in the simulated 4 mm bite registration.

Accurately identifying the terminal hinge axis is crucial for controlled clinical outcomes. As demonstrated by previous research, an anatomic facebow might help reduce possible iatrogenic effects in approximately one-third of the cases. However, an arbitrary articulation of the dental models, as in non-on-condyle virtual articulators, should be discouraged because of the high risk of undesired clinical effects.

CV – Elod Úry

Elod Úry is expert in Prosthodontics and functional diagnosis. He operates his private dental clinic in Sopron, Hungary, since 1996, and has made of continuous education his point of strength having obtained a Master of Science in Dental Science under the supervision of Prof. Slavicek after graduating at the Semmelweis Medical University in Budapest. He has participated in several postgraduate courses before becoming a VieSID Instructor. He is currently enrolled in a PhD Program through the Department of Evolutionary Anthropology of the University of Vienna, focused on the functional analysis of the stomatognatic system.

14:15-14:45



Igor Cazacu / Marcela Tighineanu / Gheorghe Bordeniuc / Valeriu Fala Moldova

The use of articulator and splints in preorthodontic diagnosis and treatment

Abstract

Temporomandibular disorders (TMD) are a group of orofacial pain conditions which are the most common non-dental pain complaint in the maxillofacial region. Due to the complexity of the etiology, the diagnosis and management of TMD remain a challenge, the consensus for which, is still lacking in many aspects. A potential structural cause for TMDs has centered on the articular disc. Displacements of the TMJ disc are widely viewed within the clinical profession as an important factor in the pathophysiological basis for persistent TMD. The solution for treating abnormalities in the dental occlusion, relates to disc relocation or stabilization, where attempts are made via intraoral appliances to achieve an optimal position.

Besides the factors related to joint morphology, there is a substantially increased treatment needs via orthodontic repositioning of the teeth for patients with TMD. Correctly orthodontic procedures need to be based on the results of careful treatment planning, in order to avoid potential complications or unnecessary treatment. A series of important occlusal and cephalometric parameters have to be considered in order to obtain a stable functional status for the stomatognathic system, especially in regard to occlusal plane (including anterior and posterior planes), the degree of correspondence between centric occlusion and centric relation and a careful assessment of asymmetry in the structures of the stomatognathic system.

Of a particular use in case analysis, treatment planning and also in the management of TMD, is the dental articulator and the directed design and usage of occlusal splints. Each case has to be approached individually, and monitored for the respective treatment outcome, in order to conduct the subsequent orthodontic treatment.

CV – Igor Cazacu

University Assistant, Department of Orthodontics

MSc, PhD Fellow, State University of Medicine and Pharmacy «Nicolae Testemițanu», Republic of Moldova

Coauthor of more 20 articles in national and international journals. Has participated in numerous scientific congresses and conferences (Austria, Romania, Moldova). Participant at national and

international invention fairs. From 2019, he is a PhD fellow at the "Nicolae Testemiţanu" University of Medicine and Pharmacy. Has underwent trainings and continuing education courses (Austria, Romania, Moldova, Ukraine, Russia, Spain, Italy). Currently – University Assistant at the Department of Orthodontics at SUMPh "Nicolae Testemitanu", Republic of Moldova.

CV – Marcela Tighineanu

University Assistant, Department of Therapeutic Dentistry

PhD Fellow, State University of Medicine and Pharmacy «Nicolae Testemițanu», Republic of Moldova

Coauthor of more 16 articles in national and international journals. Has participated in numerous scientific congresses and conferences (Romania – Iasi, Bucharest; Moldova – Chisinau). From 2020, she is a PhD fellow at the "Nicolae Testemiţanu" University of Medicine and Pharmacy. Has underwent trainings and continuing education courses – Romania, Moldova, Ukraine. Currently – University Assistant at the Department of Therapeutic Dentistry at SUMPh "Nicolae Testemitanu", Republic of Moldova

CV Gheorghe Bordeniuc

University Assistant, Department of Therapeutic Dentistry

PhD Fellow, State University of Medicine and Pharmacy «Nicolae Testemițanu», Republic of Moldova

Coauthor of more 24 articles in national and international journals. Has participated in numerous scientific congresses and conferences (Austria – Vienna, Turkey – Istanbul, Romania – Iasi, Bucharest, Galati; Moldova – Chisinau, Ukraine – Kiev). Participant at national and international invention fairs (Moldova, Belgium, Switzerland, Poland, Germany) – 1 gold medal, 2 silver medals. From 2016, he is a PhD fellow at the "Nicolae Testemiţanu" University of Medicine and Pharmacy. Has underwent trainings and continuing education courses – Romania (Bucuresti), Moldova (Chisinau), Ukraine (Kiev, Odessa). Currently – University Assistant at the Department of Therapeutic Dentistry at SUMPh "Nicolae Testemitanu", Republic of Moldova.

CV – Valeriu Fala

MSc, PhD, ScD, Associate Professor, Head of Department of Therapeutic Dentistry State University of Medicine and Pharmacy «Nicolae Testemițanu», Republic of Moldova Author of more than 55 inventions in the field of dentistry. Participant at national and international invention fairs (Moldova, Romania, Ukraine, USA, Belgium, Switzerland, China, Poland, Germany, Czech Republic, Spain, Taiwan, China, South Korea), awarded with 61 medals, including 26 gold, 19 silver and 11 bronze medals and others.

In 2010, his practice received the Gold Medal of the InfoInvent Fair awarded by WIPO (World Intellectual Property Organization) for Innovative Enterprises.

In 2018, he has received the Gold Medal of the InfoInvent Fair awarded by WIPO for Innovational Activity. Author of more than 92 scientific articles in national and international journals. Author of clinical guidebooks and monographs. Double champion (2001, 2004) of the International Contest for Restorative Dentistry "Prisma Championship" (Poltava, Ukraine). 1st place at the International Dental Contest of Clinical Cases, Moscow, Russia, 2004. Vice-president of Association of Stomatologists of Republic of Moldova (ASRM). From 2018 - Fellow of the International College of Dentists. For his Innovational activity, he has received several titles, including Commander of the Kingdom of Belgium, Commander of the Stomatological Medicine Journal (Republic of Moldova), member of the editorial board of the Stoma Edu Journal (Romania).

14:45-15:15



Cinzia Fornai Austria

The best of VieSID literature study club 2021-22: the top 10 articles dentists should read

Abstract

VieSID firmly believes in continued education.

Being well informed is instrumental to the medical practice, and teaching and research activities are indissolubly linked to studying. Thus, VieSID continues Professor Slavicek's study club by organizing monthly meetings which can be joined online at the zoom link provided below.

During the VieSID literature study club, coordinated by Cinzia Fornai and Kim Parlett and supported by a panel of reviewers, a summary of the dentistry literature published in the previous month (VieSID Press Release) is provided. Three most relevant papers are presented in more detail and are lively discussed in the Q&A session. The VieSID Press Release is regularly published on VieSID YouTube channel and is thus freely available to all at any time.

In this presentation, the 10 most informative, influential, and intriguing articles discussed during the VieSID literature study club are presented.

CV

Cinzia Fornai is an evolutionary anthropologist with main research interest in the evolution and function of the masticatory system. During the course of her postgraduate studies, concluded with a PhD through the Department of Evolutionary Anthropology, University of Vienna in 2015, she has practiced the tools and methods of Virtual Anthropology, becoming acquainted to the use of 3D imaging techniques and geometric morphometric methods for the analysis of biological forms.

As scientific coordinator of VieSID and active researcher within the Centre of Clinical Research, University Clinic of Dentistry Vienna, Department of Evolutionary Anthropology, University of Vienna, and Institute of Evolutionary Medicine, University of Zurich, she is in the unique position of orchestrating interdisciplinary research at the cross-road between dentistry, oral medicine and anthropology.

Cinzia Fornai has published over 30 articles in international, peer-reviewed journals including, Nature, Science and PNAS and has contributed to numerous scientific congresses in the field of physical anthropology, paleontological sciences, and evolutionary medicine. She has consolidated teaching experience and has organized scientific events, such as workshop and congresses.

We are looking forward to seeing you next year in Vienna at SummerSchool 2023 July 26 – 30, 2023

Vienna School of Interdisciplinary Dentistry *Education in Occlusion Medicine*

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