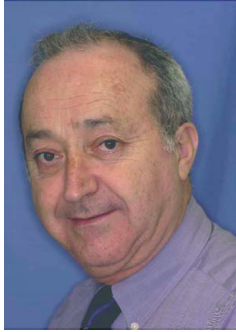


Dr Marianne Caflich est pédiatre, elle est médecin adjointe et responsable de la consultation pour adolescents à l'hôpital des enfants de l'Université de Genève.

Le titre de sa conférence est:

**"L'adolescence - une période de changements dynamique"**



Prof. Adrian Becker is Clinical Associate Professor emeritus in the Department of Orthodontics of the Hebrew University-Hadassah School of Dental Medicine, in Jerusalem, Israel.

Authored the book entitled “The Orthodontic Treatment of Impacted Teeth”, now in its second edition and has written chapters in five other books.

Over 130 published articles in the leading refereed international orthodontic journals. Guest Editor, Seminars in Orthodontics, 2010.

Reviews manuscripts for the leading refereed international orthodontic journals.

Editorial Board member of American Journal of Orthodontics and Dentofacial Orthopedics, Angle Orthodontist, Seminars in Orthodontics, Journal of Clinical Orthodontics, World Journal of Orthodontics, Orthodontics and Craniofacial Research, Progress in Orthodontics (the official journal of SIDO, Societa Italiana di Ortodonzia) and many others.

President of the VIIth International Symposium on Dentofacial Development and Function, held in Jerusalem in 1998.

Keith Godfrey Visiting Professor, University of Sydney, Australia, October/November 2005 Cecil Steiner Annual Memorial Lecture laureate, University of Southern California, Los Angeles, USA, 2006.

Invited speaker at the annual national orthodontic congresses of U.S.A. (8 times), U.K (twice), Germany (twice), Ireland, Belgium, Netherlands, Denmark, Australia, Italy, Austria, Cyprus.

Presents with Prof. Stella Chaushu 1-day and 2-day courses internationally on:

- a. the various aspects related to impacted teeth and
- b. the delivery of orthodontic treatment to special needs children.



Prof. Stella Chaushu is Head of the Department of Orthodontics at the Hebrew University-Hadassah School of Dental Medicine in Jerusalem, Israel. She is the coordinator of three different fields in the department: adult orthodontics, orthodontic treatment for impacted teeth and treatment of Special Needs children. The results of her clinical and research activities have been published in over 60 articles in international refereed journals and in many lectures and courses she has given internationally. Dr. Chaushu is a member of the Editorial Board of American Journal of Orthodontics and Dentofacial Orthopedics and reviews manuscripts for the Angle Orthodontist, European Journal of Orthodontics, Journal of Orthodontics, European Journal of Oral Sciences, Journal of Intellectual Disability Research, Oral Diseases, Quintessence, Dentomaxillofacial Radiology and International Journal of Pediatric Dentistry. She lectures and presents courses internationally, in association with Prof. Adrian Becker.

# The Orthodontic Treatment Modality for Impacted Teeth

## Lecture 1. Accurate Positional Diagnosis.

Diagnostic imaging plays an important role in pretreatment evaluation and decision-making process for orthodontic treatment of impacted teeth. Clinical information of the location of the impacted teeth is frequently sparse and the clinician must rely largely on radiographic evidence. The following information is essential for planning the best mechanotherapy strategy: exact positions of crown and root apex of the impacted tooth and the three dimensional orientation of its long axis; proximity of the impacted tooth to the roots of the adjacent teeth; presence of pathology and its spatial relationship with the impacted tooth; presence of adverse conditions affecting the adjacent teeth, including root resorption; 3-dimensional anatomy of the crown and root of the impacted tooth. Traditional 2-D radiography has many advantages in terms of radiation dose, availability and cost. Digital volume tomography (DVT) enables three-dimensional evaluation without adjacent structure overlap, improving the chances of treatment success. The relative merits of the various radiographic techniques and indications for the use of the newer modalities will be illustrated.

## Lecture 2. Impacted incisors and the principles of orthosurgical treatment

Impacted incisors are usually the result of supernumerary teeth, odontomes and past trauma. The prevalence, diagnosis, timing and management of the patient will be discussed, together with the preparation for and performance of the surgical episode. We shall illustrate the efficiency of available appliance systems and their relative merits in relation to achieving an optimal outcome in terms of appearance and periodontal excellence.

## Lecture 3. Impacted canines, surgical exposure and interdisciplinary cooperation

Are all impacted canines alike? There is a wide range of locations in which a canine may be found and for most of these there is a reasonable orthodontic approach that will lead to their successful resolution. There are several methods of exposure that may be indicated in different cases and their advantages will be discussed. Cooperation between surgeon and orthodontist is a factor that may make the difference between success and failure in these cases and a time-tested modus vivendi will be suggested. The audience will be shown how the design of the appliance auxiliaries may be altered to apply traction in a predetermined direction, to facilitate the eruption of the canine.

## Lecture 4. Failure!

Orthodontic treatment of an erupted dentition is highly predictable, but the presence of one or more impacted teeth injects an element of uncertainty. The audience will be shown a series of cases analyzing the wide range of reasons for why treatment

failed, where some could have been avoided, where others should never have been treated - at the same time and where appropriate, offering workable solutions to salvage a failing case.



Dr. Ewa Czochrowska graduated from the Dental Faculty, Academy of Medicine in Warsaw, in 1991. She completed postgraduate training in orthodontics at the Faculty of Dentistry, University in Oslo, in 1997. From 1998 to 2002 she was working as a Research Fellow in Oslo under supervision of Prof. Aril Stenvik and Prof. Bjørn Zachrisson. Dr. Czochrowska has co-authored several articles on the autotransplantation and the article on the long-term outcomes was selected by the AJODO to receive the 2002 Helen and B. F. Dewel Orthodontic Award. Dr. Czochrowska had received a PhD degree from the University of Oslo in 2003 based on her thesis on the management of missing teeth in growing individuals. She has a private orthodontic office in Warsaw and her current research is based on the outcome of tooth transplantation in Poland as well as different aspects of multidisciplinary treatment at the Medical University of Warsaw. She is currently a Council Member of the Polish Orthodontic Society and the European Orthodontic Society as well as President Elect of the EOS, for the 2014 meeting in Warsaw



Dr. Paweł Plakwicz graduated in dentistry at the Medical University of Warsaw, Poland in 1994. He completed a postgraduate training in oral surgery in 2001, while working as a Clinical Teacher and Lecturer in the Department of Oral and Maxillofacial Surgery at the Medical University of Warsaw. In 2000, he finished a postgraduate course in autotransplantation of teeth at the University of Oslo (Norway) under the supervision of dr. B. Album. In 2009 he received a doctorate degree cum laude for his thesis „Autotransplantation of developing premolars“. Currently, he works as a Senior Clinical Assistant at the Department of Periodontology, Medical University of Warsaw. He practices oral and periodontal surgery in Warsaw, with the main interest in tooth autotransplantation, guided bone

regeneration and mucogingival surgery. He is a member of the Polish Dental Association, the Polish Association of Oral and Maxillofacial Surgery, the International Association of Oral and Maxillofacial Surgeons, the American Academy of Periodontology, the European Association of Dental Implantology and the American Dental Association.

### **Autotransplantation of developing teeth - orthodontic and surgical perspectives.**

Autotransplantation, preferably at 1/2 to 3/4 final root development, is a predictable treatment modality in growing patients with missing teeth. Teeth with developing roots have an ability to: establish a normal periodontal attachment, preserve the pulp vitality and adapt to the alveolar growth changes. Developing premolars are the optimal donors because of their morphology and position in the dental arch. General guidelines for the donor and recipient site selection, including orthodontic indications for the premolar transplantation according to the protocol established at the University in Oslo will be presented during the lecture. Also the detailed description of the surgical procedure and clinical tips for a successful outcome, including the follow-up protocol will be shown. The predictability of this method will be documented based on the studies performed at the University in Oslo and at the Warsaw Medical University including studies on transplantation of developing premolars in patients with clefts. The capacity for bone preservation and regeneration is an important issue in tooth transplantation and will be discussed using clinical examples. This will also include autotransplantation of developing third molars, which may successfully be applied in selected cases. The last part of the lecture will include presentation of the surgical protocol, clinical applications and long-term results of the trans-alveolar transplantation used to upright ectopically positioned immature teeth.



Hugo De Clerck is a graduate of the Rijksuniversiteit Gent's orthodontic program, he received his PhD in 1986 and he maintained a private practice in Brussels for 22 years. He received the European Research Essay Award in 1988. He has been Professor and Chairperson of the Department of Orthodontics at the Université Catholique de Louvain from 1989 to 2006. Currently he's Adjunct Professor at the University of North Carolina at Chapel Hill. He's a former President of the Belgian Orthodontic Society and Fellow of the Royal College of Surgeons of England. His main research interests are in skeletal anchorage, biomechanics and orthopedics. He lectured extensively on these topics throughout the world.

### **Miniplate anchorage for midface protraction in class III patients and molar distalization in class II cases**

The main advantage of skeletal anchorage by modified miniplates is their fixation at a distance from the dental arch. This makes them very suitable for 'en masse' distal movement of the complete upper arch in class II treatment without extraction of premolars. Skeletal anchorage can also be used to intrude overerupted upper molars or to upright lower second molars and for mesial movement of the lower molars in case of agenesis of the second bicuspid.

Furthermore miniplates resist better to high discontinuous forces than miniscrews do. Therefore they can be used for intermaxillary orthopedic traction. Class III elastics can be fixed between Bollard anchors on the skeletal base of the maxilla and mandible of young growing patients. Can the growth of the maxilla and/or mandible be stimulated, restricted or redirected? Which biomechanical approach should be used? The results of this continuous pure orthopedic traction will be discussed based on a Cone-beam CT at T1 and T2 registered on the anterior cranial base and compared to a control group and the results of face mask therapy.