

Friday March 3, 2023, 13h40

Title of the session: **Dealing with missing teeth and facial growth**



Moderator: **Prof. Selena Toma**, Professor and Head of the Department of Periodontology, Université catholique de Louvain, Brussels. President of the Belgian society of Periodontology

### **Abstract**

The rehabilitation of young patients with single anterior implants after a trauma, endodontics complications or absence of teeth due to agenesis for example could be very challenging. Several years after the placement of dental implant, the continuous facial growth may lead to implant in infra-position and impair esthetic outcomes and / or function. These complications represent a significant limitation for the use of dental implant especially in young patients. The management of such complications in the esthetic zone often need a combined prosthetic solution and soft tissue interventions. Alternative treatment using cantilever bonded bridge in combination with muco-gingival surgery could also represent an option.

Sometimes conventional techniques with dental implants or cantilever bonded bridge are not applicable. Autotransplants could be proposed as a treatment option especially in adolescents and young adults or adult patient having a high remodeling rate.



**Dr Nicole Winitsky**, a Senior prosthodontic consultant at Folkandvården Eastman Dental Institute, Public dental health service and a PhD-student at the Faculty of odontology, Karolinska Institutet, Stockholm, Sweden will, based on her long-term research on single anterior implants, discuss this topic.



**Prof. France Lambert**, Professor and Head of the Department of Periodontology, Oral Surgery and Implant Surgery at the University of Liège and **Prof. Amélie Mainjot** Professor in Dental Biomaterials also at the University of Liège and Head of the Dental Biomaterials Research Unit (d-BRU), Belgium will discuss advantages and limitations of these combined (prosthetic and soft tissue treatments) by step by step clinical cases.



**Dr Dick Barendregt**, Periodontist, Adjunct Professor at the Department Periodontology, Adams School of Dentistry at the University of North Carolina and private practice in Rotterdam, author and co-author of several articles and chapters on dental traumatology and autotransplantation will present us more than 20 years of results in autotransplants in a clinical pitch.

**Aims:**

1. To know How to plan treatments to minimize the risk of infra-position for our patients
2. To know How much infra-position can we expect?
3. To know How to manage such complications in the esthetic zone combining prosthesis and soft tissue interventions.
4. To give a short overview of the autotransplants as an option

**Key points to remember (examples)**

1. The rehabilitation of young patients with single anterior implants after a trauma, endodontics complications or absence of teeth due to agenesis for example could be very challenging and need a careful clinical and radiological examination in order to propose to most suitable treatment and to minimize the risk of infra-position.
2. Several years after the placement of dental implant, the continuous facial growth may lead to implant in infra-position and impair esthetic outcomes and / or function. This situation should be anticipated by choosing the right treatment plan.
3. How much infraposition can we expect? What are the patients' reactions to this phenomenon? How do we plan our treatments to minimize the risk of making this a problem for our patients?
4. A team approach for management of such complications in the esthetic zone combining prosthetics and soft tissue interventions is often needed.

5. Additionally, in order to prevent complications associated to facial growth, alternative treatment using cantilever bonded bridge in combination with muco-gingival surgery should be considered
6. Autotransplants were a widely used treatment option in the Scandinavian countries. The principle supporting the success of autotransplants as published the last more than 50 years, is a vital periodontal ligament. This provides a normal development of the surrounding tissues and adaptation to the natural growth/remodeling of the patient. This is in sharp contrast to dental implants which fails to have the same characteristics and are therefore not applicable adolescents and young adults or adult patient having a high remodeling rate.