



# EUROPEAN SOCIETY OF DENTAL ERGONOMICS

## 23<sup>rd</sup> Annual Meeting, 4-5 June 2010 in Ghent, Belgium

### AN ERGONOMIC WAY OF SITTING, LOOKING AND ORGANIZING IN DENTAL PRACTICE - AN ANALYSIS OF IMPORTANT ASPECTS –

**Registration:** Thursday, 3 June, before the Get together party, starting at 20.00 hrs.  
Friday 4 June, registration desk open on 08:00 hrs.

### Friday, 4 June 2010

09.00-09.20 Welcome address and introduction.

**09.20-12.15 Visual perception and use of various optical means.**

*Peter Derksen, optometrist, and Joseph Wouters, registered occupational assessor and ergonomist (NL)*

*Unit 1. Function of the eye: perception, visual acuity, viewing direction eyes, influence lighting, perception at the end of the working day.*

*Unit 2. Corrections, its possibilities, form and size of working frame, visual acuity and working distance, discrepancy multifocal and dentistry.*

*Unit 3. Use spectacles and loupes: position upper body and arms, viewing direction, use spectacles and spectacles with prism, research output, advantages and disadvantages of loupes, correct adjustments loupes, use of lighting.*

**10.30-11.00 Break and visit posters.**

*Unit 4. Operating screens in dental practice: the use of images on a flatscreen, consequences of visual corrections, requirements position screen, size letters in relation with distance, contrast, requirements use of screen, future systems.*

*Unit 5. Use of a microscope, principles of use and ergonomic aspects.*

*Unit 6. Practical experiences: with good and bad solutions.*

**12.15-13.30 Lunch and visit posters.**

**Program A: Intended for an introduction to an ergonomic patient treatment.**

13.30-16.45 **Basics of an ergonomic approach. Principles and practical use**  
*Jacqueline Bos, physiotherapist and Rolf de Ruijter, dentist and dental ergonomist (NL).*

*Unit 1. Sitting working posture: principles, working stool and way of using. Patient positioning: body, head and jaws and support of neck and head. Requirements patient chair for dentist and comfort of patient. Sitting around patient and positioning instruments and operating light.*

*Unit 2. Four handed dentistry: general principles.*

14.45-15.15 **Break and visit posters**

*Unit 3. Ergonomic checklist for dental equipment: for use in the individual situation.*

*Unit 4 Demonstration of an ergonomic check of dental equipment.*

*Unit 5. Final discussion, with summary.*

**Program B Intended for discussing the theoretical background of a working posture.**

13.30-16.45 **Theoretical basis sitting working posture.**

*Paul Engels, dentist (NL)*

An introduction to basic knowledge of the anatomy and physiology of the human body, when standing, lying in the patient chair and emphasized: the working posture of the sitting dentist.

Unit 1. Live anatomy for understanding posture. Availability of this knowledge: why?. Summary anatomy and physiology, as presented during ESDE meetings. Balance and equilibrium: basis features.

14.45-15.15 **Break and visit posters.**

Unit 2. Role masticatory system as part of the human kinetic chain. Basic principles of a healthy sitting posture. Physical problems related with a bad posture. Physiological and anatomical background of the ergonomic requirements regarding the operator's stool. Reflection about the lack of interest of the dentist for own well-being.

17.00-18.00 **General Assembly**

20.00 **Festive dinner**

## Saturday, 4 June 2010

- 09.00-10.00 **Use kinetic energy in microscope dentistry.**  
*Peter Kotschy, MD, DDS, general dentist, specialized on microscope dentistry and specialist for periodontology (A).*  
Unit 1. Kinetic preparation in microscope dentistry: ergonomic approach, use of instruments for caries preparation, via direct and indirect vision, application of kinetic preparation with alumina grains.  
Unit 2. Microscope-controlled glass bead blasting for perfect root cleaning and micro-invasive pocket surgery: a contact free, least perceptible, minimal invasive treatment, performed strictly located in the infected periodontal pocket; as substitute for periodontal access-flap therapy.
- 10.00-10.45 **Organizational ergonomics – reflections and guidelines.**  
*Karin Hjalpers, PhD, Research fellow, DDS, (SE).*  
Overall job satisfaction: affected by both individual resources and work organization.  
The patient relation: the core of dentistry.  
Health and collegial relations in work life of dentists.  
The dentist's decision authority and professional autonomy.  
Achieving a sustainable working life.
- 10.45-11.15 **Break and visit posters.**
- 11.15-11.45 **Ergonomic use of different data systems in relation with patient treatment.**  
*Jari-Pekka Teräväinen, Export Manager, Dental Care Units Division and Osku Sundqvist, Digital Imaging and Applications. Digital imaging and Applications Division, Planmeca (SF).*  
Dealing with different kinds of patient data.  
X-rays and Cone beam CT scanner.  
Digital registration functioning dental unit.  
Contact dental technician, e.g. digital impression taking.
- 11.45-12.15 **Possibilities of patient communication systems.**  
*Szilárd Varga. Product Manager Treatment Centers, Sirona (GE)*  
What is patient communication. Today's possibilities.  
A look into the future.
- 12.15-13.00 **Ergonomic design of instruments for root planning and scaling.**  
*Karen Neiner, Vice President Periodontal Strategic Business Unit and Corporate Development, Hu-Friedy, (USA).*  
Form and construction of handles of instruments.  
New instruments.  
Development of functional tips to use from a correct posture.
- 13.00 **Closing ceremony and lunch.**

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