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Media release

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4th International CAMLOG Congress

Implant dentistry and festive mood in the Swiss Alps

The 4th International CAMLOG Congress held in early May in Lucerne offered science, practice and events on literally the highest level. The workshops and two marvelous parties took place at spectacular locations high above Lake Lucerne. The mix of science and practice was also well received by the more than 1,300 participants. In addition to an exciting overview of the state of research, all sorts of practical tips were offered and discussions held.

The congress program at the grand Culture and Congress Center Lucerne had been consistently composed. After opening with classical music, renowned speakers from academia and practice presented facts and figures on the implant/abutment connection. Outstanding long-term results can be achieved with CAMLOG® implants and abutments with identical diameters. According to statistics from the University of Mainz/Germany, the ten-year survival rate for CAMLOG® SCREW-LINE implants is 98.2 percent and from the University of Kiel/Germany, 96.2 percent for CAMLOG® SCREW CYLINDER* implants including high-risk patients.

*CAMLOG SCREW CYLINDER implants are no longer available.

The horizontal offset between implant shoulder and abutment (platform switching) also works with parallel-walled connections such as the Tube-in-Tube from CAMLOG. Preliminary results of a randomized multi-center study at the Universities of Coimbra (Portugal), Kiel and Mainz show stable bone conditions for CAMLOG® SCREW-LINE Promote® plus implants after two years. With platform switching, researchers even found a significant increase in the crestal bone level.

According to Professor Frank Schwarz (University of Düsseldorf/Germany), the horizontal displacement of the gap area can be crucial for bone stability. Accordingly, no significant differences between conical and butt joint connections with platform switching can be demonstrated. According to a separate animal histological study, no inflammatory infiltrate can be identified for CONELOG implant with integrated platform switching at bone level[1] although current in-vitro studies show lacking bacteria density with conical connections.[2, 3]

Space for soft tissue

There could also be benefits to platform switching in terms of the soft tissue. Several speakers in Lucerne showed the typical tight-fitting, hoop-shaped soft tissue cuffs below the implant crown. According to Professor Wilfried Wagner (University of Mainz), CONELOG® implants are suitable for soft tissue because of the additional space in the esthetic region in particular. In a multi-center study with CONELOG® implants, Professor Mariano Sanz (Complutense University of Madrid/Spain) is currently studying the impact of the abutment-connection time on peri-implant soft tissue.

Precision and biomechanics

Various speakers in Lucerne emphasized the simple, precise application of CONELOG® implants. In contrast to other systems, the conical abutment can be safely and easily removed from the implant. As a benefit of the CAMLOG® and CONELOG® sister systems, their minimum manufacturing tolerances can also be mentioned.[4] This is of particular importance for the accurate transfer of implant positions and the long-term success of implant-retained restorations.

Professor Thomas Taylor (University of Connecticut/USA) emphasized the value of a well-documented implant system. Based on scanning electron microscopic images of the surface of copied implants, he demonstrated that macroscopically identical implants differ significantly qualitatively. "Copied implants may work or may not work."

Benefits for titanium bases

One-piece zirconia abutments are no longer used by Dr Michael Stimmelmayr (Cham, Germany) for mechanical and biological reasons.[5] According to a yet unpublished in-vitro study, the 10x harder zirconium of one-piece zirconia abutments causes a massive loss of substance on the titanium inner surfaces of the implant.[6] In the worst case, according to Stimmelmayr, this can require removal of an osseointegrated implant.

Workshops with an alpine view

The Congress opened on Thursday with four workshops in glorious weather. Workshop participants traveled on gondolas to the Pilatus at more than 2,100 meters with spectacular panoramic views of 70 alpine peaks. The four workshops on the subject of soft-tissue management were fully booked with 160 participants. There was again a good mix of practice and science either in German or in English.

Even the legendary CAMLOG Party had been sold out early. Therefore, the party was held twice on the summit of Mount Rigi, the so-called "Queen of Lucerne mountains". Guests enjoyed pure Swiss tradition with alphorns, banner swingers, dancers in traditional costumes, cheese, chocolate and much more. The parties raised the roof twice on Mount Rigi while participants danced deep into the night with hot live bands and the right dance mix.

On Saturday, Professor Jürgen Becker (University of Düsseldorf/Germany), president of the host CAMLOG Foundation, heartily said goodbye to the CAMLOG Family. The 5th International CAMLOG Congress will be held in Spain in 2014.

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Literature

1. Canullo L, Fedele GR, Iannello G, Jepsen S. Platform switching and marginal bone-level alterations: the results of a randomized-controlled trial. *Clin Oral Implants Res* 2010 **21**: 115-121.
2. Harder S, al. e. Evaluation of intraimplant bacteria contamination of two-stage implants. *J Dent Res* 2011; **90**.
3. Rack T, Zabler S, Rack A, Riesemeier H, Nelson K. A quantitative in-vitro study of conical implant-abutment interfaces of dental implants after fatigue loading using synchrotron-based radiography. *Int J Oral Maxillofac Implants* 2012_submitted.
4. Semper W, Kraft S, Nelson K. Position stability of conical implant-abutment connections. *Clin Oral Investig* 2012_submitted.
5. Stimmelmayr M, Sagerer S, Erdelt K, Beuer F. In-vitro fatigue and fracture strength testing of one-piece zirconia implant abutments and zirconia implant abutments connected to titanium cores. *Int J Oral Maxillofac Implants* 2012_accepted.
6. Stimmelmayr M, Edelhoff D, Güth JF, Erdelt K, Happe A, Beuer F. Wear at the titanium-titanium and the titanium-zirconia implant-abutment interface: a comparative in-vitro study. *Dent Mater* 2012_submitted.

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The CAMLOG Foundation is a foundation established by scientists under Swiss law. It engages in targeted support of gifted young scientists, promotion of basic and applied research, and continuing training and education to promote progress in implant dentistry and related fields to serve the patient. As part of its scientific mission, the CAMLOG Foundation has assumed patronage of the International CAMLOG Congresses, which take place every two years.