camlogfoundation

Media Release

July 2016

6th International CAMLOG Congress with record attendance and enthusiastic participants

This year's 6th International CAMLOG Congress took place 9 - 11 June in Krakow, under the motto "Tackling everyday challenges". Over 1,300 delegates from all over the world as well as 76 internationally renowned speakers and moderators had traveled to this exceptional event. Krakow and the ICE Congress Center proved to be the perfect choice for this congress, which combined successful research with practice and addressed the key topics of tissue stability, treatment planning and Digital Dentistry.

How can predictable, esthetic implant restorations be achieved with good long-term stability? What considerations have to be taken into account regarding hardware as well as surgical and prosthetic methods? What role do diagnostics and planning play? How can peri-implant hard and soft tissue be kept stable? Experienced and also young clinicians provided convincing answers to these and other questions.

Vertical position takes precedence over connection type

A five-year randomized controlled study from the University of Coimbra, Portugal showed that with platform switching, the bone level in the anterior teeth of the lower jaw increased by 0.1 mm on average. At the same time, given platform matching, there is a minimal decline in the bone level averaging 0.2 mm. Measured at the time of implantation, the difference in bone level amounted to 0.5 mm in favor of platform switching – within an implant system with Tube-in-Tube connection (CAMLOG® SCREW-LINE Promote® plus). An investigation with CONELOG® SCREW-LINE – a system with conical connection and integrated platform switching – showed

0.2 mm growth after the prosthetic restoration, i.e. only a slightly higher bone gain. According to a study from the University of Mainz, when positioning the implant shoulder on or slightly below the bone level, CONELOG leads to more reliable bone stability than with supracrestal positioning. As already discussed two years ago at the 5th International CAMLOG Congress in Valencia, the vertical implant position could therefore be more important for bone stability than the type of connection.

Soft tissue protects bone

Professor Tomas Linkevicius (University of Vilnius, Lithuania) demonstrated that thick soft tissue protects the underlying bone against resorption According to his study, a peri-implant mucosa thickness of less than 2 mm above the alveolar ridge is critical for bone stability. Thickening with autogenic or allogenic connective tissue is effective against bone resorption – even with platform matching. In contrast, in case of thin tissue, increased bone resorption also has to be expected if platform switching is used. In order to avoid bone resorption, Dr. Monika Puzio (University of Wroclaw, Poland) recommends augmenting with connective tissue transplants if the buccal connective tissue is less than 2 mm – analogous to the crestal jaw bone.

Abutments with attachment

Thick connective tissue closure in the region of abutment emergence could also contribute to controlling the bone resorption. According to Professor Myron Nevins (Harvard University/ Boston, USA), a thick soft tissue cuff prevents apical migration of the sulcus epithelium. This was confirmed by a study presented by Dr. Gerhard Iglhaut (Memmingen, Germany) in which an implant system with laser-structured implant neck was investigated (Laser-Lok®, BioHorizons).

iSy – acquire patients with the new concept

According to a retrospective analysis of iSy by CAMLOG conducted in three practices, there is a very good survival rate for implants of 97.6 percent. Based on standardized protocols and the components for preparation, impression-taking and temporary restoration, the system is not only very efficient to use, but also highly cost-efficient. CAD/CAM solutions are consistently integrated. This allows new patient groups to be acquired for which cost plays an important

role: According to Dr. Stefan Ulrici (Leipzig, Germany), "iSy is an implant system, but above all a concept."

Short implants versus augmentation

In case of limited bone height in the lateral lower jaw, short implants are a successful solution, according to Professor Bilal Al-Nawas (University of Mainz, Germany). Al-Nawas views immediate implantation critically, especially in case of inflamed alveoli. In a retrospective study, 32 percent of the implants inserted at positions of endodontically failed teeth developed peri-implantitis. Professor Robert Sader (University of Frankfurt am Main, Germany) made the case for using the shortest possible implants to avoid augmentation. A current systematic literature review shows that short implants (≤ 8 mm) in the posterior region are of equal standing to longer implants in terms of survival, marginal bone resorption and prosthetic complications. On the basis of finite element and micro-CT studies, Sader formulated the thesis that the peri-implant bone around short implants develops a denser trabecular structure than around longer implants on account of the higher force applied per unit area. In a clinical study he initiated himself, his team tested the current prospects for success of CONELOG® SCREW-LINE 7 mm implants in the posterior region of the upper jaw to avoid a sinus lift.

Is peri-implantitis avoidable?

To be in a position to diagnose the bone loss due to peri-implantitis, Professor Mariano Sanz (University of Complutense/Madrid, Spain) proposed taking an informative X-ray image at the time of prosthetic restoration. Additional probing is indicated in all recall sessions to detect inflammatory processes. Early treatment of mucositis symptoms is the best way of preventing peri-implantitis. Professor Sanz also considers favorable peri-implant soft tissue architecture as a key preventive factor. This in turn depends on the configuration of the transmucosal zone and hence on the implant-abutment connection. Professor Katja Nelson (University of Freiburg, Germany) investigated various implant systems for their sealing and mechanical stability in the ring accelerator at the European Synchrotron Radiation Facility (ESRF). According to her results, there is, for instance, no significant difference between conical and parallel connections with regard to the size of the microgap and the stability of the connection. What can be observed, however, is that thin implants deform relatively strongly and also permanently under load and may lead to unfavorable stress applied to the crestal bone. In addition, due to overloading of

the implant wall fractures occur frequently, especially in the posterior region. According to Nelsons' observations, this occurs mostly with conical connections and less with parallel connections, as in these cases the load is transferred to the implant shoulder. Regarding peri-implantitis, Dr. Dietmar Weng (Starnberg, Germany) views the microgap as a means of entry and exit for microorganisms and thus as a primary cause of peri-implant inflammation. A minimized gap, which he attributes to primary conical connections, may therefore be more important for bone stability than the horizontal offset in platform switching.

The battle – heated discussions on controversial topics

The highlight of both days of the congress was the closing session. Different opinions were hotly discussed in "debates". The audience had the opportunity to ask questions at any time via app, which were than addressed in the panel discussions. For example, Dr. Markus Schlee (Forchheim, Germany) cast doubt on the etiologic leading role of the biofilm. Other speakers evaluated this similarly in their contributions. Often it was unclear why some patients suffer from peri-implantitis and others don't. As the available therapy methods would have an uncertain prognosis, Schlee in many cases prefers explantation and, where appropriate, repeated implantation. Professor Frank Schwarz (University of Düsseldorf, Germany) contested this; there has yet to be a study in which bone resorption without biofilm-induced inflammation could be detected. Various methods have been verifiably successful, also therapeutically. Depending on the situation, implant surfaces need to be smoothed with rotating instruments. All speakers agreed that a whole series of factors favor peri-implant inflammation, including periodontitis, quality and quantity of soft tissue, implant position, cement residues in the sulcus (remedy: the use of a retraction ligature) and the surface properties of the implant, abutment and restoration. The etiological role of host factors, such as systemic diseases, immunology and genetic disposition, is less well researched. In case of doubt, e.g. in Professor Myron Nevins' opinion, implants should be avoided and a bridge placed where possible.

Digital Dentistry pre-congress

A pre-congress devoted to the topic of Digital Dentistry was staged for the first time the day before the start of International CAMLOG Congress. Implantation and prosthetics can be planned on the computer in new dimensions, standardized methods and material quality allow

improved predictable outcomes, but this only works with the suitable technology and sound knowledge, as experts from universities, practices and laboratories showed in Krakow.

The future is open and digital

Where does the digital path lead? For instance, will we only work with virtual models in the future? The moderators Professor Irena Sailer (University of Geneva, Switzerland) and MDT Christian Hannker (Hüde by Diepholz, Germany) received differentiated answers in lectures and panel discussions. The team of Dr. Peter Gehrke and Carsten Fischer (Ludwigshafen and Frankfurt am Main, respectively) were convinced that "analog work steps will stay with us for a long time". The digital future clearly belongs to open systems with original STL files. The first closed systems have already disappeared from the market. Those who combine components should however know all providers and partners and communicate with them competently. In order for digital techniques to gain acceptance, in the view of Professor Florian Beuer (Charité Berlin, Germany), all participants should overcome their mental blocks. Copying analog processes digitally does not lead to the desired objective. In Krakow, many examples showed how analog and digital processes complement one another and open up completely new possibilities. Despite all visions, at the end of the congress Professor Sailer formulated an understated conclusion: "Digital technology has come on a long way, but we haven't arrived yet."

Hands-on workshops

Numerous delegates took the opportunity of attending the practical workshops on the day before the congress. Renowned speakers explained scientifically proven surgical and prosthetic techniques and treatment concepts for daily routine in dental practice. The workshops provided excellent opportunities for a fruitful exchange between the speakers and industry partners. The insights gained then led to further in-depth discussions amongst colleagues on the following two days of the congress.

Young generation

One of the aims of the CAMLOG Foundation is to support young scientific talent. The CAMLOG Foundation offers the Research Award and the chance to take part in the poster competition in which over 60 posters from nine countries competed this year. As a new feature, the poster

participants for the first time had the chance to present their posters orally. The well frequented Speakers Corner generated keen interest and while some speakers were already accomplished lecturers, others were offered the opportunity to present for the first time.

CAMLOG Foundation Research Award

Worth a total of EUR 20,000, the prestigious CAMLOG Foundation research prize was once more awarded during an International CAMLOG Congress. The jury selected publications which investigated the influence of platform switching on the changes in the bone and the success rate of immediately loaded fixed mandibular prostheses. The prize was awarded to young, talented research scientists who had published their studies during the two years running up to the congress. Assistant Professor Dr. Salomão Rocha, Coimbra, Portugal won the first prize. The second prize was awarded to Dr. Maximilian Moergel, Mainz, Germany and the third prize to Stefan Krennmair, Wels, Austria.

Hard Rock CAMLOG

Krakow was rocked! The old tram depot was transformed into a genuine rocker hangout, Harleys roared in the front and an AC/DC cover band and other live acts turned up the heat to boiling point. Most of the participants were dressed in line with the motto and the accessories distributed at the party were eagerly grabbed and worn. Culinary needs were met with a buffet, as well as from the trendy food trucks, leaving no wish unfulfilled. With captivating live music to suit all tastes, the party lasted until the wee hours.

Conclusion

Yet again, the 6th International CAMLOG Congress provided a successful combination of top-level science, relevance to dental practice and a captivating mood. The Krakow congress brought a wealth of information to bear on current questions directly applicable in daily practice. Particularly fascinating was the exchange between experts, many of whom are successful in their own practices, as well as in research.

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The **CAMLOG Foundation** is a foundation established by scientists under Swiss law. It specifically supports talented young people, the advancement of basic and applied research, as well as the ongoing education and training for the development of implant dentistry and related fields in the interest of the patients. In recognition of its responsibility to science, the **CAMLOG Foundation** has assumed responsibility for the scientific program of the International CAMLOG Congresses, which take place every two years.