

QUARTERLY

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Can we have a word with you?

An interview with Professor R. Ewers,
President of the camlog foundation



Thank you, Prof Ewers, for granting us this interview. It surely will be interesting to the friends of the **camlog foundation** to learn more about the president of our foundation. By way of introduction, would you briefly tell us about your origins and your professional background?

My origins in oral surgery are based on a familial, perhaps hereditary predisposition. In 1930, my mother and my aunt started their studies in dentistry in Tübingen, and my sister and her husband, Prof Motsch, were and still are enthusiastic dentists.

Initially, I studied dentistry and, almost simultaneously, with a delay of one year, I also studied medicine. Thus, I was able to conclude both curricula in 12 semesters.

I completed all my studies in Freiburg im Breisgau, followed by a year as an assistant doctor in Münster. After that, I went to the USA for one year of basic surgical training and then returned to Freiburg to train as a specialist and do postdoctoral studies with Prof Schilli. Subsequently, I worked as an assistant doctor to Prof Härle in Kiel.

In 1989, I was invited to Vienna to take the chair of oral and maxillofacial surgery. Today, I am still an enthusiastic new Viennese and new Austrian.

I consider my roots to be in dental oral maxillofacial surgery, which is also of great importance in craniofacial surgery. The extensive field of oral and maxillofacial surgery as well as implant dentistry, including prosthodontics, can only be mastered or at least be understood by someone who comprehends and can handle the stomatological system.

Today – in addition to your honorary appointments – you hold two principal positions, one as the chairman of the Viennese University Clinic for cranio-maxillofacial and oral surgery and the second as the owner and director of the CMF Institute, also in Vienna.

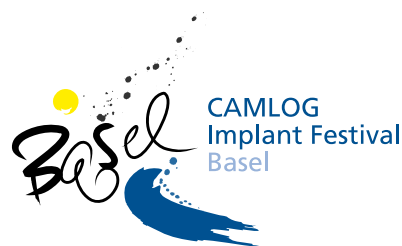
I am not particularly pleased about this separation, I would definitely prefer both functions to be joined in the large University Clinical Centre.

1st anniversary of the camlog foundation

In May 2006, the **camlog foundation** was initiated and presented to the audience of the First CAMLOG Implant Festival in Montreux. Today, we already count more than 670 members from 23 nations all over the world.

On the occasion of our 1st anniversary, we want to sincerely thank our members for all the interest and support they have given to the concept of the **camlog foundation** as well as to the products and services of CAMLOG Biotechnologies AG, our founder and sponsor. We are looking forward to an exciting future with many projects in the pipeline, first of all the Second CAMLOG Implant Festival, which will take place in Basel, Switzerland, from May 9th until 10th, 2008 under the aegis of the **camlog foundation**.

The **camlog foundation** always highly appreciates any communication from your side by mail or email.



May 9–10, 2008
Please reserve the date

However, due to local Austrian customs, full professors usually also maintain private practices, and the corresponding patient clientele prefers to be treated outside the University Clinic, so I established the Institute for Cranio-Maxillofacial Rehabilitation. I operate it along with experienced prosthetists in order to provide comprehensive implantological care.

In addition to your clinical tasks and your research activities, you have a considerable program of lectures all over the world. Can you tell us something about that?

Alongside the patient tasks and research activities, teaching is my third principal task.

I try to impart the knowledge gained from my research activities and experiences from my medical activities to younger colleagues. I am fortunate, as I like to give lectures and presentations, and I love to be a teacher.

Furthermore, travelling always holds a special attraction for me. I learn new things and have the opportunity to familiarise myself with the latest developments at conventions, while taking part in promoting the speciality on the front line.

May we suppose that your readiness to assume the leadership of the **camlog foundation** ties in with your teaching and communication activities?

In 1965, I started my studies together with Dr Axel Kirsch. Since then, we have been bound by an increasingly committed friendship and scientific collaboration, as well as a fascination for new developments. Based on this friendship and the conviction that CAMLOG implants are the optimal product, I gladly assumed the position as president of the **camlog foundation**.

Looking back on nearly 42 years of activities as a student, assistant and university professor, I would not want to have missed a day. Medicine, dental medicine, and the speciality of oral and maxillofacial surgery have always been more interesting and more exciting to me than any thriller. We have been able to close many gaps by applying one knowledge puzzle piece after the other. My profession, including travelling, fascinates me daily, a fascination that does not let go of me and which makes me seek new solutions, again and again.

A year after its establishment, the **camlog foundation** is still at its very

beginning. Can you state in rough terms what the long-term goals are?

I would like to further promote the basics of implant dentistry and the idea of the CAMLOG family, and in a sense «perfect» both. I see my function as president of the **camlog foundation** as coordinating and optimising the speciality through mutual respect, understanding and collaboration for the benefit of our patients. I would like to help colleagues to take pleasure in their work and be beneficial to themselves and their environment as members of the **camlog foundation**.

It is my wish to shape the **camlog foundation** into a large organisation providing many benefits to many people. Every member should develop a feeling of association so that everyone imparts her/his knowledge and thus, we represent a forum where maximum patient care is the ultimate ambition. Each person should be proud to belong to this foundation and develop the need to participate actively.

Professor Ewers, thank you very much for this conversation. We wish you a lot of success in your varied and challenging activities.

INTERVIEW: DR WALTER GEHRIG

Local and systemic conditions potentially compromising osseointegration

Report on the 15th Annual Scientific Meeting of the European Association for Osseointegration, Part III

PROF ANDRÁS FAZEKAS

The main objective of the EAO's 15th Annual Scientific Meeting was to summarize the current knowledge of implant dentistry in specified scientific fields. The goal of this paper is to present scientifically based evidence in the topic of local and systemic conditions potentially influencing osseointegration, found and formulated by the Study Group 3 of the EAO Consensus Conference.

In dental implant therapy, biological response mainly depends on two basic factors:

- » Biocompatibility of the intervention and the applied implant system
- » Capacity of the recipient organism to accept the implant.

In case of applying a modern implant system and treating a totally healthy patient, long-term success rates can reach up to 99%, assuming diagnosis, treatment protocol and patient compliance are impeccable. Taking for granted that complete oral and systemic health are quite rare, a thorough analysis of possible local or systemic disorders that can jeopardize therapy success has to be made.

Study group 3 of the Consensus Conference accomplished a literature assessment in this field. They arranged the scientific information which could be accessed on PubMed according to given aspects. Manual searching was also carried out. Besides formulating

evidence in this field, the aim of the study group was to summarize the clinical conclusions and to formulate a recommendation for future scientific investigations.

During information analysis, it turned out to be a major problem that a great number of articles were not scientifically impeccable for various reasons. Most of the studies had a retrospective design; they were not well controlled and showed a lack of consistency in accounting patient drop-outs. In addition, implant failure was often the only clinical finding used for determining treatment outcome. Local factors that can influence the clinical result – besides periodontitis – such as bone density, horizontal and vertical dimensions of the alveolar ridge, and the ability to stabilize implants during insertion, were also considered. Systemic considerations affecting implant therapy, various systemic diseases and their treatment, and the systemic components of periodontitis were involved.

Among systemic disorders with a possible effect on the success of implant therapy, the following were analyzed: scleroderma, Parkinson's disease, Sjögren's syndrome, HIV infection, pemphigus vulgaris, ectodermal dysplasia, long-term immunosuppression after organ transplantation, cardiovascular disease, Crohn's disease, controlled diabetes Type 2, and osteoporosis (Mombelli et al. 2006).

Conditions that are generally considered as absolute contraindications to implant dentistry were not included in the analysis. Implant failures were referred to as «early» when they occurred before, and «late» when they occurred after functional implant loading. Because of significant heterogeneity, the issue of causes was not included in the strategy of the literary investigation. As to the problem of implant therapy in cancer cases, the consensus report refers to the publications of Chiapasco (1999) and Granström (2003). The conclusion of the analysis in case of the above-mentioned diseases was that the level of evidence for absolute or relative contraindications for implant therapy in the presence of a systemic disease is low and implant therapy should be determined very meticulously under such circumstances.

Regarding the outcome of implant therapy in patients with previous periodontitis, the following conclusions were drawn as a result of the literature analysis: «Survival of the supras-structures and the implants was not significantly different in individuals with periodontitis-associated and non-periodontitis-associated tooth loss. However, significantly increased incidences of periimplantitis and periimplant marginal bone loss were revealed in individuals with periodontitis-associated tooth loss.» (Schou et al. 2006.) Bone density was analyzed as a decisive factor:

«The following information was assumed from the evaluated literature:

- » There is some evidence that DEXA and the subjective intraoperative assessment can distinguish between different bone densities as determined by histology.
- » The Lekholm & Zarb (1985) classification has not been validated histologically.
- » A positive correlation between qCT and microcomputerized tomography (mCT) as well as qCBCT has been reported.
- » The utility of any of these measurements of bone density for the prediction of implant success has not been assessed.» (Neukman, F.W. & Flemming, T.F., 2006)

As to bone quality, primary stability defined as «a lack of mobility of the implant immediately after placement» was also dealt with.

The following methods may be mentioned for measuring primary implant stability:

- » Tactile assessment
- » Insertion torque measurement
- » Resonance frequency analysis
- » Breaking point.

«There is no evidence to support or refute that breaking point and resonance frequency analysis immediately following implant insertion are related to implant outcome. In implants with delayed loading, insertion torque measurements were not found to be related to implant outcome.» (Neukman, F.W. & Flemming, T.F., 2006)

Augmentation procedures for rehabilitation of edentulous ridges were also an important topic of the Consensus Conference.

«The following procedures have been most often reported:

- » Guided bone regeneration
- » Autogenous onlay bone grafts
- » Sinus floor elevation
- » Inlay grafts including nasal lift, mandibular inlay grafts, and Le Fort I osteotomy with interpositional grafts
- » Bone splitting for ridge expansion
- » Distraction osteogenesis; and
- » Revascularized flaps.»

Literature information regarding augmentation procedures of deficient alveolar ridges did not allow a direct comparison between most procedures. Varying operator experience may limit generalization of the reported results, too. The only direct comparison of any of the techniques listed above is a randomized controlled trial, in which guided bone regeneration or distraction osteogenesis were used. No significant difference in implant survival rates was found.

Information on the outcome of augmentation procedures revealed the following:

- » Guided bone regeneration has been used primarily in small- and medium-sized deficient ridges. Most studies, including resorbable and non-resorbable membranes and a variety of grafting materials, reported implant survival rates above 90% over 6 months to 11 years. In up to one third of the cases, membrane exposure and/or local infection were reported. Management of these problems can be more complex in case of non-resorbable membranes.
- » Autogenous onlay bone grafts have been applied in a wide range of deficient alveolar ridges. The survival rate of implants placed in augmented ridges ranged from 60% to 100% over 6 months to 12 years. Compli-

cation rates at the graft recipient site have been reported to occur in up to 8% and were mostly exposures of the graft and infections.

- » Sinus floor augmentation has been used to increase the edentulous ridge in the posterior maxilla using autogenous bone, bone substitutes, and a combination of both and various techniques. The survival rates of implants in the augmented maxillary sinus ranged from 60% to 100% over 6 months to 12 years. Complications following these procedures have been reported in about 13% of cases, mostly consisting of perforations of the Schneiderian membrane.
- » Distraction osteogenesis has been used primarily for vertical augmentation of deficient ridges. The survival rates of implants in vertically augmented bone ranged from 90% to 100% over 6 months to 5 years. Complications occurred in up to 29%, mostly deviations of the vector.
- » Bone splitting for ridge expansion has been used in narrow ridges with sufficient vertical height. The survival rates of implants ranged from 91% to 100% over 6 months to 6 years. Information on complication rates is inconclusive.
- » Application of nasal lift, Le Fort I osteotomy, and free flaps has been limited to severe ridge and jaw deficiencies, and there is insufficient information on treatment outcome.
- » For procedures that require autogenous bone harvesting, the additional risk for morbidity at the donor site needs to be considered.
- » A partial resorption of the augmented bone has been frequently described for most of the assessed ridge augmentation procedures (Chiapasco et al. 2006). (Citation taken from Neukman, F.W. & Flemming, T.F., 2006)

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Impressum:

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