The 5th EAO Consensus Conference 7–10 February 2018, Pfäffikon, Schwyz, Switzerland

Replacing missing teeth using dental implants is a frequently used treatment modality in clinical practice (Derks et al., 2016). Research involving clinical case series, prospective and retrospective studies, and controlled clinical trials aim at improving success in implant dentistry (Moraschini, Poubel, Ferreira & Barboza Edos, 2015). Every year, large numbers of publications appear in the dental literature shedding light on many aspects related to the treatment of patients with dental implants (Berglundh, Wennstrom & Lindhe, 2018; Filius, Vissink, Cune, Raghoobar & Visser, 2018; Windael et al., 2018). The resulting progress is made up of many individual pieces of knowledge scattered in the articles published in a large number of journals in implant dentistry and related fields. In order to collect the many data pieces, to analyze and summarize the information available, and to assess the progress made in implant dentistry, the European Association for Osseointegration (EAO) regularly organizes Consensus Conferences. The aim of these consensus conferences is to analyze the state of the science in clinically important areas of implant dentistry, to deduct implications for clinical practice and provide guidelines for patient treatment, and to identify pertinent questions for future research and development.

PROCESS OF CONSENSUS CONFERENCE ORGANIZATION AND IMPLEMENTATION

According to the established tri-annual rhythm, the European Association for Osseointegration (EAO) organized its 5th Consensus Conference in Pfäffikon, Switzerland, in 2018. The structure successfully applied in the previous EAO Consensus Conferences (Hammerle, Klinge & Quirynen, 2015; Hammerle & Quirynen, 2009; Hammerle, Quirynen & Klinge, 2012; Hammerle & van Steenberghe, 2006) was again used.

The board of directors of the EAO as the responsible body appointed three chairpersons Björn Klinge (Sweden), Henning Schliephake (Germany), and Christoph Hammerle (Switzerland) and gave them the task of organizing this consensus conference. An international scientific committee was formed consisting of Hugo de Bruyn (Belgium), Nikolaos Donos (United Kingdom),

Lisa Heitz-Mayfield (Australia), Bjarni Pjetursson (Iceland), Marc Quirynen (Belgium), Isabella Rocchietta (United Kingdom), Irena Sailer (Switzerland), Mariano Sanz (Spain), Frank Schwarz (Germany), Søren Schou (Denmark), Daniel Thoma (Switzerland), Ann Wennerberg (Sweden), and the three chairpersons of the consensus conference. This group collectively selected the topics to be reviewed and discussed at the conference, appointed the rapporteurs to write these reviews, assigned the group secretaries and chairpersons to guide the groups, and invited the group participants. All in all 62 researchers and clinicians from 19 countries took part in the 2018 EAO Consensus Conference.

Among many interesting topics, the following four were identified as pertinent for gathering more sound information and thus for allowing further progress in implant dentistry:

1. Drugs and diseases affecting implant therapy
2. Biological parameters to assess implant health and disease, dental implant registry
3. Aspects of implant-borne reconstructions
4. Biomechanical aspects of implant-borne reconstructions

The resulting reports summarize the major findings from the reviews, present consensus statements related to the topics discussed within each group, make recommendations for clinical practice, and suggest implications for research. All this is now available in this supplement to *Clinical Oral Implants Research*.

A major point of discussion during the conference was the quality of the data available in the general dental literature to answer the clinical questions posed by the conference. The conference participants identified a significant need for better quality of study design and data reporting in various fields investigated by the groups. In clinical research, there is a specific need to identify relevant clinical questions—in particular related to the performance of different clinical treatment modalities—to choose the appropriate controls, to thoroughly assess clinical outcomes also including patient-reported outcome measures, to completely gather all relevant data, to allow open access to the original data sets, to apply suitable methods for data analysis, and to report all pertinent data in peer-reviewed journals.

SPECIAL PUBLICATION REPORTING CLINICAL RECOMMENDATIONS

In order to further disseminate the scientific information in this supplement and to bridge the gap to clinical practice, the EAO is making a special effort to translate the major findings into clinical decision-making. For this purpose, a special group of clinicians and scientists of the EAO was preparing recommendations for decision-making regarding choice of procedures in clinical practice utilizing questions derived from clinical cases. These will be published in a different format by the EAO in conjunction with the dissemination of this supplement.

IMPLANT REGISTER

In the medical field, several hundred quality registers have been established, most often at the initiative of the respective professional societies (Emilsson, Lindahl, Koster, Lambe & Ludvigsson, 2015; Manning et al., 2015; Rakhurst et al., 2017). These initiatives have been regarded as a positive professional act to improve patient care. The registers allow for a systematic follow-up of the clinical outcome of procedures and devices in various clinical settings. The patients in the registers often reflect clinical routine without selection: that is “the real world” and not only results from specialist centers.

The Board of European Association for Osseointegration (EAO) has discussed an initiative to explore the conditions to establish a dental implant register. It was suggested to bring this issue to the EAO Consensus Conference 2018 for a discussion and to propose relevant and manageable parameters. An article describing select medical registers and the subsequent consensus statements regarding a tentative dental implant register is included in this supplement.

CONFERENCE FUNDING EXCLUSIVELY BY THE EAO

The EAO as an independent professional organization active in implant dentistry was the only body covering the costs of this consensus conference. No outside funding was used neither for the conference nor for publishing this supplement. All the conference participants were asked to declare dual commitments and possible conflict of interests verbally and in writing. The written forms are kept on file at the EAO secretariat. Thanks to the continuous efforts of the EAO board to maintain its independence the EAO is able to provide this valuable information to the field of implant dentistry based on the state of the science.

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The organizers express their special thanks to all the participants of the conference for dedicating their time, for providing valuable input, to the rapporteurs for their important efforts to prepare the

reviews, the chairpersons and secretaries for guiding the group discussions during the conference and for writing the consensus reports of their groups, to the board of directors of the EAO for the mandate to organize the 5th EAO Consensus Conference, and to the members of the EAO Office for their enthusiastic support. Furthermore, the expertise and dedication of Lisa Heitz-Mayfield, the editor-in-chief of *Clinical Oral Implant Research*, are highly appreciated. Finally, the continuous support of Wiley-Blackwell is acknowledged allowing the results of this conference to be published in this highly ranked and respected scientific journal.

Christoph H. F. Hammerle¹

Björn Klinge^{2,3}

Henning Schliephake⁴

¹*Clinic of Fixed and Removable Prosthodontics and Dental Material Science, Center of Dental Medicine, University of Zurich, Zurich, Switzerland*

²*Division of Oral Diseases, Department of Dental Medicine, Karolinska Institutet, Stockholm, Sweden*

³*Department of Periodontology, Faculty of Odontology, Malmö University, Malmö, Sweden*

⁴*Department of Oral and Maxillofacial Surgery, University Medical Centre Goettingen, Goettingen, Germany*

Correspondence

Christoph H. F. Hammerle, Clinic of Fixed and Removable Prosthodontics and Dental Material Science, Center of Dental Medicine, University of Zurich, Plattenstrasse 11, 8032 Zürich, Switzerland.

Email: christoph.hammerle@zzm.uzh.ch

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