How much aesthetics do we need in implantology?

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The DGZI’s 46th International Annual Congress was dedicated to quite a provocative topic. For this year’s congress, the Deutsche Gesellschaft für Zahnärztliche Implantologie (DGZI) picked the best-possible location with Bavaria’s Wiesn metropolis Munich.

The scientific directors of the two-day event chose high-calibre speakers to approach and discuss a topic which has been interpreted differently over the past two decades of oral implantology, ranging from the purely surgical implantology of the early years with an almost total neglect of aesthetic needs over an exaggeration of aesthetic aims via oral implants up to the pragmatic juxtaposition of both positions.

“Congress makers” Prof. Dr Herbert Deppe and Prof. Dr Roland Hillie have succeeded in their endeavour to present this practice-oriented and at times controversial topic in its entirety, giving important impulses for its implementation to the dental practice. In their introductory speech, the two scientific directors pointed out that while dental implantology was scientifically approved 30 years ago and can hence look back on a long history, some of the initial problems have remained unsolved in spite of the numerous achievements in this discipline. Europe’s oldest dental society wants to face those challenges and offer some possible solutions.

The start of the congress: a strong signal

Not only was the presence of numerous associated implantological societies from abroad, among them delegations from Japan, Eastern Europe and Northern
America and the Arab region a strong indication of the congress’ success, but already its introductory session was made to set an example of scientific brilliance: Prof. Dr. Ralf Smeets (Germany) and Prof. Dr. Suheil M. Boutros, Dr. Nick Caplanis and Dr. Glenn Bickert (USA) presented their extensive implantological knowledge and experience, with Prof. Dr. Ralf Smeets giving an impressive speech on his implantological findings. Prof. Dr. Suheil Boutros, who has been closely associated with the DGZI for many years, had chosen an especially delicate topic with the replacement of the upper central incisors. His fellow speakers Dr. Caplanis and Dr. Bickert agreed with him on the fact that an extensive implant planning should have the highest priority in successful implantology, along with a sound implantological education.

After completing the introductory session of the congress, participants were given the opportunity to attend various podiums such as the congress’ main podium, its international podium, corporate podium or the Munich Forum for Innovative Implantology. Choosing among this plethora of scientific events constituted most certainly a luxury problem of this congress weekend. Some participants made a virtue out of necessity by choosing exclusive speeches from each podium, thus frequently travelling around in Munich’s Westin Grande Hotel.

Switching speeches paid off, with three renowned German implant prosthodontists Prof. Dr. Thomas Weischer, Dr. Peter Randelzhofer and Prof. Dr. Peter Pospiech participating in the main podium alone. Taking the discussions into account, one thing is certain: digital implantology has established itself in prosthetic dentistry and features many options and opportunities while also making intense and thorough education and technical affinity mandatory. This firework of prosthetic topics appealed to dentists and dental technicians alike.

DGZI has been closely associated with dental technicians, thus organising a curriculum on implant-based prosthetics in cooperation with Fundamental GmbH (Germany), resulting in a great number of graduates as well as committed DGZI members. To put it briefly: the DGZI’s interface between dental technology and implantology is very much alive.

In addition, the international podium of the congress featured renowned speakers such as Prof. Dr. Jeff Johnston, Prof. Dr. Suheil Boutros and Dr. Edward Sevetz. While Japanese speakers had dominated the international podium during last year’s event, speakers from Northern America prevailed at this year’s congress.

Implantological complications were the central topic in the US trio’s reports, with Prof. Johnston giving a general overview and Prof. Boutros elaborating on Sinus complications. Dr. Sevetz spoke on restorations in the edentulous maxilla without augmentation. The speakers’ key messages were: There is definitely a trend towards minimally invasive procedures, augmentation is not a necessary requirement, and extensive preoperative planning is the key to success. The best trouble shooting is the complication that never occurs.

The cooperative podium has a long long-standing tradition at DGZI Congresses and has become a fixed component of the scientific programme on Fridays. It mostly features practice-oriented speakers, for example delegates from industrial partners. However, this does not preclude the possibility of innovative and ambitious topics—quite the contrary. With speeches on hyaluronic acid in periimplantitis treatment by Prof. Dr. Frank Liebaug (Germany) or tissue management by Dr. Stefan Neumeyer and Dr. Henrik-Christian Hollay (Germany), among others, the contributions to the cooperative podium captured the
The audience’s continued attention. In addition, Dr Ulf Meisel (Germany) illustrated his experiences with the bone-level tapered implant, which he finds to be a helpful addition to the product portfolio in certain situations. Christian Möller, MS. (Germany) introduced his findings on the minimally invasive alveolar ridge preservation while Dr Thilo Damaskos (Germany) spoke about digital backward planning.

The fourth podium held on the first congress day, the Munich Forum for Innovative Implantology, is a project very dear to DGZI President Prof. Dr Herbert Deppe. Not only is Prof. Dr Deppe Chairman of the Forum, but he also contributed the first speech to its scientific programme. In his report on the relation between dental implants and systemic diseases, Prof. Dr Mauro Marincola (Italy) spoke in favour of “shorties”. His research, as well as the research of other authors, suggests that short implants can be a reliable therapy option in these cases.

Speakers Dr Eduard Krahe and dental technician Bernhard Zierer (Germany) paid tribute to the congress topic by promoting a paradigm shift in implantology due to medical indications as well as aesthetic criteria. Last but not least, Prof. Dr Gabriele Kaeppler (Germany) talked about 3-D X-Ray procedures in dental implantology.

The evening was concluded by a unique Bavarian night with Oktoberfest flair, which particularly delighted the Japanese and American delegations. “Today was one of the most enjoyable nights in my life—and that in ‘serious’ Germany!”, an American participant summarized. After all, this was one of the rare occasions to witness the DGZI members of the board dance in traditional costume atop of the Oktoberfest ale-benches...

Different approaches—DGZI Controversial!

Traditionally, the second congress day of the 46th International Annual DGZI Congress is dedicated to controversial discussions. This year, this tradition matched well with the overall congress topic, causing many speakers to present their findings which culminated in the successful panel discussion “DGZI Controversial”. With Dietmar Weng and Michael Stimmelmayr (Germany), the DGZI Congress makers were able to sign up two of the most renowned scientific representatives of the field. They introduced different approaches for the preservation of the alveolar process and discussed their application in the dental practice.

Before, private lecturer Stimmelmayr had given an overview on efforts and limitations of ridge preservation in the aesthetic zone, pointing out that extensive planning, surgical expertise and the patient’s individ-

Fig. 5: Prof. (CAI) Dr Rolf Vollmer and Prof. Dr Mario Rodrigues-Tizcareno.

Fig. 6: Master dental technician Michael Anger is awarded the “Tätigkeitsschwerpunkt zahntechnische Implantatprothetik – DGZI”.

Fig. 7: Practical workshops were part of extensive congress further education programme.

Fig. 8: Dr Mazen Tamimi at the Schütz Dental Booth.
ual condition play an enormous role in the decision-making process for an aesthetically “successful or failed” case. “There are only two options to respond to bone loss”, said Stimmelmayr, one on the bone level and one on the soft-tissue level. There was no doubt that Stimmelmayr favoured a soft-tissue based response, paying special attention on the double-arm Punch soft-tissue implant, which he had developed in order to improve the compromising situation in all dimensions. While Stimmelmayr introduced numerous extensively documented case reports which supported the benefits of this procedure, its success appeared to be limited by a missing buccal bone lamella or difficult initial situations such as prominent Jugae alveolariae.

Private lecturer Dietmar Wenig followed a different path, leading him away from technophilic, complex augmentations and towards simplification: “Simplify your augmentation!” (Do not rebuild, refill!). Seizing the opportunity, Wenig took up Stimmelmeyers postulation that socket preservation was impossible in the aesthetical zone and explained that implants today are inserted differently from the techniques applied a few years ago. “Previously documented procedures are mostly techniques developed by oral surgeons for oral surgeons”, Wenig claimed and consequently stated his preference for simple and predictable methods. Immediately after extraction, there are usually three or four defect walls, which can be loosely filled (no cramming!) and covered by a membrane in order to achieve a bundle-bone effect. A gelatine sponge is used for coverage towards the oral cavity. After six months, implantology can take place in a well-prepared surrounding. In short: Simplify your implantology!

In this session, the President of the DGZI contributed a well-received speech about surface morphology of dental implants after insertion to the jawbone, while Dr Stefan Röhling (Germany) posted that ceramic implants were no fashion phenomenon, but constitute a serious alternative to titanium implants, especially in the aesthetic zone. This speech was followed by Prof. Dr Knut Grötz, who defined differential implant-design indications with regard to aesthetics and function. He stated that individual patient conditions, for example periodontitis or systemic diseases (diabetes etc.) need to be taken into account for an accurate prognosis of the long-term success of implantation. Consequently, implant design should be chosen individually for each patient, according to Grötz, who thus subscribed himself to individualised medicine. His advice: When in doubt, apply a tissue-level implant. He also pointed out that the biological basis has to be adequate, as aesthetically successful results are impossible without socket healing or preservation. This notion was fully supported by Prof. Dr Mario Rodrigues-Tizcareno (Mexico) in his speech. Grötz focused on the bone bundle, which he defined as a part of the periodontium: “If the desmodontium is destroyed, for example in case of severe periodontitis, the buccal bone bundle inevitably will follow”.

DGZI member of the board Prof. Dr Kai-Olaf Henkel (Germany) touched a controversial topic by illustrating complications in implantology. He started his speech by stating that “failure is a part of implantology”. However, Henkel claims, failure also constitutes a chance, for example to form a friendship with the patient after successful complication management.

The two congress days were packed with vast information, constantly demanding a high level of attention and concentration from congress makers and auditorium alike. And yet—or perhaps exactly for that reason—participants left the congress halls with contented faces having gained a great deal of new impulses and knowledge: While Munich is always worth a trip, so was the 46th International Annual DGZI congress. It certainly lived up to its high expectations and sparked anticipation for next year’s congress.

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