

From the Editor's Desk

First of all, I am very happy to report that we received a lot of positive feedback on the new look of the Forum Implantologicum that we introduced in the last issue. The Editorial Board sees this as a clear sign that the fresh and contemporary design was very well received by you, our readership. In addition, I personally received several positive comments about the quality of the content. These ITI friends liked the main topics we had chosen in the most recent issues. All of them were of high clinical relevance and we will continue in the same way.

In line with the latest volume of the ITI Treatment Guide series entitled “Digital Workflows in Implant Dentistry”, which was published earlier this year, the Editorial Board of the Forum Implantologicum decided to center this issue around the topic “Digital Implant Dentistry” and the question whether digital technology is ready for daily practice. Four author teams were approached and asked to shed more light on the different aspects of the digital workflow in implant therapy.

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The development of digital technology (DT) in implant dentistry started in the early 2000s, when the new Cone Beam Computed Tomography (CBCT) was developed, which allowed 3-dimensional radiographic examination of the jaws with much better image quality and clearly reduced radiation exposure than the previously used dental CT. CBCT is considered the most significant innovation in implant dentistry in the first decade of the 21st century. It has several advantages since it offers much better treatment planning and is a fantastic research technique, facilitating numerous radiographic studies to examine anatomic structures or the examination of the long-term stability of dental implants. A further major achievement for DT was the broad development of intraoral scanners. Here the MedTech industry made substantial progress over the years. This was followed by the development of treatment planning software, allowing matching of DICOM and STL files. The last aspect of DT is the CAD/CAM (computer assisted design/computer assisted manufacturing) production of various tools or components for implant therapy, such as surgical stents, prosthetic mock-ups, provisionals, or final restorations. This list of innovations clearly demonstrates the tremendous development over the past 20 years. It was driven by the MedTech industry and various very active groups, mainly at universities.

DT became a hot topic at all major congresses and symposia in this period and created a hype which has to be seen critically. As the ITI mainly recommends evidence-based clinical protocols, it is important to

critically evaluate the state of the art of DT, whether it is ready for routine application in private practice. When I lecture at congresses and ask, who is routinely using DT in daily practice, the percentage of positive replies is surprisingly low, most often less than 10%. There are critical questions about the precision of DT, the enormous time investment required for treatment planning using DT, the significant investment costs necessary to use DT in daily practice, and the additional costs of DT for the patient when the technique is utilized. In consequence, the digital transformation in implant dentistry will take more time than anticipated, and it is most likely that DT will be utilized by many only in specific clinical situations such as flapless implant placement.

The four papers give a good overview of where we are today with DT. The progress of DT, but also the open questions that still exist, are well presented by the four author teams. The topic is rounded off with an “Ask the Experts” article in which four clinicians outline in a short and concise statement to what extent they have already implemented digital technology in their daily implant-related treatment.

Along with our regular “Meet the Researchers” feature, in which researchers talk about their ITI-funded study and its impact, this issue also includes a report on the 2019 André Schroeder Research Prize winners, an entertaining interview with long-standing ITI Fellow Will Martin about his use of Apple Keynote for his lectures and presentations and a report on the 11th Young ITI Meeting that took place in Berlin in April.

I wish you happy and informative reading!

Daniel Buser
Editor-in-Chief