I am seeing more and more misadventures dealing with complex implant cases. In particular, in the last several months I have seen numerous loading problems dealing with full arch restorations. By and large, the vast majority of these issues relate to a failure in the initial diagnosis. We know from our experience in continuing education courses that diagnosis and decision-making are always the most difficult things to teach and convey. Implant dentistry is now an integral part of many dental practices, however most dentists receive their education in implant dentistry after graduation, with little emphasis on the identification of the complexity and risks of treatment.

I recently became interested in a concept called the SAC classification. SAC stands for Straightforward, Advanced, and Complex. The SAC classification was first described by Sailer and Pajarola in 1999 as a method to categorize degrees of difficulty in oral surgery. In 2003 SAC underwent extensive review and was adapted for implant dentistry; it was also the topic of the ITI Consensus Conference in 2007 to standardize their application.

The basis of the SAC classification is that clinical situations in implant dentistry present with varying degrees of complexity. The SAC classification has applications in esthetical, restorative and surgical situations but can also be helpful in all forms of implant dentistry. Knowing in advance how complex an implant case is can ensure there are no surprises in the course of treatment, or if necessary, can allow you to refer the case to someone who is better able to perform the risky portion and return the case to you for the easy treatment. Usage of the SAC classification can assist practitioners in avoiding difficulties in implant and prosthetic cases as well.

It is, therefore, vitally important that we as practitioners are willing to acknowledge that some cases are more complex or difficult than others, and that we may need experts to deal with such cases. Finding an appropriately qualified colleague to manage a particularly complex case can prevent the case developing catastrophic complications and can avert a poor outcome.

Complex cases simply cannot be treated with a straightforward approach of "open the flap and see what we can do". For these types of cases more of a "reverse planning" approach is recommended—i.e. determine the plan of treatment by starting at the end-point. Generally, working forward from today incorporates neither resource implications nor integration needs. We are mentally so accustomed to the traditional form of thinking that we overlook important items and needs, and make subconscious assumptions that are not necessarily valid. Instead, periodic "reality checks" of the content of our plan of action and its implementation should occur. Regardless of how well planned cases are, 'things' never work out quite as envisaged— all too often real-time developments lead to detours. To minimise such occurrences, modern implantology diagnostic tools like DVT and computer assisted planning are very helpful in complex cases.

Establish the goal, begin at the end and work backward! If done correctly, we will have an ever-evolving, reality-based, integrated plan that will actually work to achieve our patients’ aims.

Currently we, as an expert scientific implant association, are happy to offer our colleagues the possibility of undertaking company-independent implant training courses including masters programs at universities. Many dentists involved in the surgical or restorative aspects of implant care obtain continuing education in implant dentistry and belong to professional implant organizations like the German Association of Dental Implantology (DGZI). Our continuing education programs (e.g. our basic curriculum and our Annual Meetings) are some of the best I have ever attended, nationally or internationally.

I hope to see many of you later this year in Berlin from the 1st to 2nd of October to celebrate our fortieth anniversary with an outstanding scientific and social program.

Sincerely

Dr Rolf Vollmer