



Guest Editorial Complications: Why?

At the recent meetings of the American Academy of Periodontics and the American Association of Oral and Maxillofacial Surgeons, the topics that attracted the most attendees centered around the issues of complications in various treatment regimens. The question that one must ask is, Why? Why are so many clinicians seeking solutions to problems when there seem to be so many approaches to successful treatment and treatment planning? How can so many well-trained individuals have so many untoward results? Bone and soft tissue grafting are topics at virtually all symposia, and three-dimensional treatment planning is featured at every implant-related symposium. The advent of in-office cone beam computed tomography scanners and three-dimensional software provides an additional method for evaluating complex cases. There is very little information that we cannot obtain about patients before they go into surgery. So why with these advances in technology and techniques do we continue to see an increase in complications, problems, and less-than-ideal results?

As I consider this complex problem, several thoughts come to mind regarding the institution of new techniques and the renewal of old procedures. First, many clinicians seem to divorce themselves from the basics of biology and wound healing. The understanding of the vascular supply to a given area and the basic principles of why something heals is often lost in the mecca of some new technique or technology. Flap design, suturing techniques, and patient health and habits all play an important role in short- and long-term treatment results. The idea that technology can somehow replace sound surgical principles is something that is pervasive in today's throwaway literature. Gimmicks have replaced treatment planning principles. It seems that an instrument can now somehow endow a clinician with the ability to accomplish a procedure that is inherently at odds with the basic biology of the region. Perhaps a microscope will allow us to see better, but it will not change an underlying tissue bed nor will it allow us to augment bone with little or no blood supply. Three-dimensional imaging is great, but it will not allow us to change the implant bed, only to identify the potential implant position. Our goal should be to harmonize the biology of an area with new materials, drugs, or instruments, not to sacrifice one for the other.

Of equal concern is the continuous litany of course materials that espouse the merits of certain treatments and the ability to achieve perfection, when in fact perfection is not attainable. A question we all must ask is how many images of patients were culled to find the ideal case, and if a given case is only one in ten, then can we realistically expect to be able to incorporate the technique into our daily practice? Continuing education is important, but it should not be tainted with the arrogance of a company logo or the backdrop of a certain material or product. Determining what is practical and real is often difficult. We all want the best for our patients; however, as we look at case studies, we must realize that many times a certain technique or treatment is just not feasible for a particular patient. Sometimes it is better simply to say that it cannot be done than to push the envelope for an unattainable goal. In part, our reliance on questionable continuing education creates an atmosphere for failure. Evidence-based treatment must be the paramount benchmark for patient care.

Technology is wonderful; it has taken all of us to the next level of therapy. However, it is my plea that we do not abandon the basic biology lessons that we all learned years ago. The bone cell, the soft tissue matrix, and the influence of drugs and systemic health are factors that we should not forget. Some of our best results are achieved using basic procedures rather than high technology developed in the labs of large corporations. Many of us still follow the impeccable basic principles introduced by Professor P-I Brånemark more than 20 years ago. Nothing has changed in the human species during that time that makes the bone or soft tissue cell different. It has only been the advent of technology that has tried to move us forward, perhaps too quickly. We must maintain the basic principles and resist the urge to sprint ahead. We must continue to practice evidence-based therapy. Perhaps then we will see fewer complications and a reduced impact of negative results on our patients. We should remember that our degrees are based on years of sound science, not short-term techniques.

Jay P. Malmquist, DMD
Professor
Oral and Maxillofacial Surgery
Oregon Health & Science University
Portland, Oregon