Practicing Proactive Dentistry With GALILEOS Comfort PLUS

Placing periosteal implants in the early 1980s—as Douglas M. Schulz, DDS, did for a brief time—was very different than it is today. However, after becoming, as he says, a “Sirona convert” 16 years ago with his purchase of a CEREC® system, the Overland Park, KS, general practitioner has reveled in the ability to offer his patients the advantages of what he calls the “magic window” afforded by advancements in imaging and treatment planning, especially 3-dimensional (3-D) imaging.

Schulz, who has used the GALILEOS Comfort PLUS 3-D imaging system for the past several years, says marrying CEREC CAD/CAM technology and GALILEOS 3-D imaging has dramatically impacted his practice. “When you bring 3-D imaging into your practice, it changes the whole way you look at treatment planning for patients. Further, with guided surgery and cone beam, placing implants is enjoyable and much easier to do. It completely transforms what a general dentist can do,” he says.

Schulz attests that he has been able to help patients like never before with 3-D images of their entire skull, showing conditions that could not be seen on a 2-dimensional (2-D) x-ray. An especially dramatic example, he says, was the discovery of a tumor underneath the floor of the eye on a man in his 30s the sixth time he performed a scan with his GALILEOS system.

With 3-D, Schulz explains, dentists can also alert patients to more common health concerns. “3-D imaging really impacts every aspect of dentistry, not just implantology. We are able to look at wisdom teeth differently. We can determine tooth position—whether it’s lingual or an impacted canine—for the orthodontist or surgeon who needs to extrude.” He adds that 3-D examination also enables dentists contemplating root canal treatment to more easily find the canal(s) in root, even before opening up the tooth.

The technology, he says, also “enables dentists to be preemptive”—ie, to identify a problem before it becomes a crisis. “If the scan shows there is a major abscess or bone loss around a root or roots, it’s just a matter of time before it becomes a serious problem—with pain, swelling, and possible tooth loss. We can treat it at an earlier stage when we see it while it is still asymptomatic.”

With GALILEOS and its latest software, Schulz says, even doctors who don’t offer sleep dentistry now have the ability to detect and make patients aware of airway issues such as obstructive sleep apnea. Further, doctors who treat patients with airway issues with appliances can evaluate their effectiveness by scanning and quantifying airway space before and after treatment.

In general, Schulz says, dentists can practice predictable dentistry and offer better service to their patients, including the ability to see their problems in 3-D and better understand the need for treatment. Additionally, he says, there is the capacity to provide the convenience of single-visit restorations—eg, crowns, veneers, or onlays using CEREC.

Moreover, using these tools, he asserts, improves the ease of implantology. “Using CEREC and GALILEOS technology, we can design the restoration and literally design the implant based on the restorative outcome we want. Then, using a SICAT surgical guide from Sirona or one fabricated using CEREC technology, we can predictably put an implant in within 200 microns and a degree or two of accuracy.”

Comparing general practitioners to “quarterbacks” in that they lead and coordinate the total treatment for the patient, Schulz says he prefers to get the “big picture” using the largest volume image. “I want to know as much as I can: What’s going on with the patient’s joints? Do they have any TMJ or TMD issues? Do they have any sinus pathology? Do they have failing dental issues?”

Schulz says his highest priority is offering his patients the best care possible, and he believes he is doing so while enjoying practice like never before. “I never thought I would be practicing this kind of dentistry, but I’m having more fun and doing it better and more easily than ever.”