





GALILEOS, THE QUINTESSENCE OF MODERN DENTISTRY

Imagine the Possibilities



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The new Cerec Bluecam and the CERECdoctors.com faculty

members continue to push the envelope with unrivaled digital precision within restorative dentistry. We all dream of having the same precision when it comes to our diagnostic skills. At times we find ourselves scratching our heads when trying to formulate the "ideal" treatment plan for a given clinical finding such as a questionable tooth (due to bone loss or failing RCT) and are unable to do so simply because we do not have enough information. We should all agree that any given clinical circumstance will have several different solutions depending on the skill, mindset, and capability of the clinician. What if clinicians had access to a crystal ball, giving us a glimpse as to the most "ideal" treatment choice for ANY given clinical presentation? Would I gain your attention if I told you that the crystal ball that we all dream of is finally here! Allow me to introduce modern dentistry's prophet, the Sirona



Galileos. The inspiration behind Sirona's new X-ray technology, Galileo Galilei, a researcher and scientist whose studies long ago included medicine, mathematics, and astronomy, brought the world into the third dimension. Like Galileo, the Sirona Galileos gives dental diagnostics the third dimension and we are closer to reaching the true pinnacle of diagnostic and therapeutic potential.

There are few things that have truly revolutionized dentistry. One such technology is 3D X-ray imaging called Cone Beam Computed Tomography (CBCT). Of the practitioners that have embraced such technology, only a few have mastered CBCT and continue to promote its vast benefits, while the majority have plundered in its

raw complexity. The majority, by no fault of their own, simply do not use the technology to it's full potential because they are not supplied with all the tools, training, and software necessary to maximize its potential. Fortunately, they don't realize this since they have not experienced the Galileos platform. Sirona's unveiling of the Galileos has opened a new chapter in the lives of many clinicians, both novice and experienced users, including myself. My decision to introduce CBCT imaging into my practice early 2008 was to satisfy my inherent desire to push the envelope and my inherent flaw (like many other dentists) of needing to know everything. The Galileos truly allows me to visualize the most accurate anatomic information to treatment plan procedures and achieve optimal oral health, wellness and rejuvenation for all my patients.

The Galileos is the primary diagnostic tool and is the cornerstone of my practice since it is useful in all facets of dentistry: Implantology, Endo, TMJ, Pedo/Ortho, Perio, Oral Surgery, Pathology, and Restorative Dentistry. Regardless of the treatment modality, the Galileos helps to identify, diagnose, treatment plan, and fulfill therapy and prevention. It has opened my eyes to a different level of dentistry. Prior to opening my private practice, I was fortunate to serve as a CBCT consultant and have experience with the majority of the other CBCT available in the market. During my lectures, I mention how shopping for CBCT is like shopping for a digital camera at your local electronic store. All of the digital cameras (in our case CBCT) take a picture. Some take better pictures than others, while others come packaged with all the bells and whistles, and only a few do both. Let's just say that there is a good reason why the



Galileos is taking over the market. In my opinion, the Galileos is on a completely different playing field and is set apart from the rest. While other corporations struggle to position their CBCT unit ahead of their competition...fighting for market position by offering trivial solutions to even more trivial problems, Sirona has introduced the Galileos as a platform that will carry clinicians into the future. In less than one year, I have witnessed the Galileos Revolution as it has become the a leader in CBCT imaging. It is much more than just

another diagnostic tool as the sophisticated design of the hardware and dynamic software allowed me to reach my primary goal instantly: high case acceptance rate and satisfied patients.

With the Galileos as my primary diagnostic tool, patients are more inclined to pursue recommended therapy and treatment simply because they understand 3D. As clinicians, we need to remember that the 2D Xray images that we trained on are completely foreign to the vast majority of our patients. Why



should we expect our patients to see and understand diagnostic information in the vary image it took us the greater portion of 4 years of dental school to learn how to read. Perhaps this is why many of us struggle to surpass 70% case acceptance rate. If I told you that the Galileos has allowed me to achieve an overall case acceptance rate beyond 90%, would I have your attention? If your patients are impressed with Cerec CAD / CAM, wait until you see the expression on their faces when they see their skull revolving in three-dimensional

glory. Being a Cerec dentist, Laser Dentist, iTero Dentist, blah blah blah dentist, I can comfortably say that no other technology captures the patient's attention like Galileos. As one dives into the three-dimensional journey using Sirona siCAT's patented examination software, so too does the patient. I have yet to witness a patient interested in understanding absolutely everything within their 2D X-rays,. Whereas, with the Galileos, I capture the attention and interest of all my patients, each and every time. All of a sudden I have patients showing up to my practice who are actually interested in obtaining optimal dentistry and achieving complete oral health. Is the Galileos a marketing magnet for amazing patients, or did the Galileos trigger something special in the minds of my average patients? Regardless, I am enjoying every moment!

My interest in integrating CBCT was to satisfy the need to build implantology within my practice. By now, we are all aware that CBCT imaging is implant driven. Little did I know that the Galileos was indicated in all facets of dentistry. The Galileos is marked by superior image clarity and dynamic software that allows the clinician to quickly and efficiently study images. Most CBCT units have cumbersome software that limits clinicians in their ability to diagnose comprehensively, in part because of lack of functionality and efficiency. Unfortunately, in the United States clinicians do not have the luxury of spending hours on end for each patient. We have seconds, minutes if we are lucky, to evaluate our patients, diagnose, treatment plan, and hopefully gain case acceptance. Many have failed to integrate CBCT imaging successfully into practice simply because the software and hardware of their respective CBCT unit does not allow them to. Sirona and siCAT, on the other hand, have identified the need to develop software that is as effective as efficient from a clinical standpoint.



The list of unique features are endless, so allow me to share what I feel are the most revolutionary. First, Sirona is not just about excellent image quality – Sirona is about providing a solution that offers practitioners an

arsenal of tools. The user-friendly software tailored for dental problem-solving will win you over through its intuitive integration of diagnostic, computer-aided therapy planning, and precise intraoperative implementation tools. Excellent image quality permits diagnosis of the finest details in three dimensions, with the lowest possible radiation dose among the CBCT units available. When using the Galileos, its superior image processing and display capabilities leave no doubt about the diagnosis. The software's implant planning functionality – such as marking the nerve canal in the mandible and selecting realistically displayed implants from the clinician's

manufacturer of choice (an entire library of implants is included with the Galileos) – enable precise positioning within minutes after obtaining the scan. Patients are presented with their treatment plan in the same appointment and do not need to come for secondary treatment conferences as is the case when using the other CBCT units. Furthermore, with Galileos surgical guide technology, all virtual plans can be

precisely implemented for the patient, using tools that are already on-hand. These surgical guides allow for advanced prosthetics that can even be fabricated prior to surgical placement of implants.

Finally, as a beta tester for Galileos, the biggest buzz revolves around Sirona's release of their new Galileos Software Update, Sirona Implant, allowing integration between prosthetic and surgical planning: The new software tool combines CAD/CAM Cerec and CBCT Galileos data. The integration allows for surgical and prosthetic planning to be performed in a single visit. This seamless process results in higher quality and increased efficacy for clinical workflow. The use of Galileos CBCT imaging for precise surgical planning and placement is tested and proven. Unfortunately, even with the help of this latest X-ray technology, careful surgical planning does not does not always translate to ideal prosthetic restorations. Far too often, ideal surgical placement leads







to restorative compromises and higher costs for the restorative clinician and for the patient. The new Sirona Implant software tool allows surgical and prosthetic planning to be performed simultaneously therefore increasing optimal results. The user is able to view the Cerec design proposal directly within the context of the Galileos image. Essentially, allowing one to design an ideal crown on an exact virtual bony model of the patient. This has become possible due to the integration of the surface data (Cerec) with the x-ray data (Galileos). The combination of two cutting-edge technologies - CBCT and CAD/CAM - is trailblazing the way to comprehensive implantology. In other words, the user can focus on the desired prosthetic outcome and at the same time make allowance for specific surgical factors. Furthermore, the revolutionary integration feature has immense periodontal implications. Until now, CBCT was limited to hard tissue images and lacked ability to capture periodontal tissue. For the first time in CBCT imaging, the periodontal tissues can be evaluated for location and thickness in 3D as it relates to hard tissue (thanks to





Cerec surface data). Imagine being able to visualize ideal implant placement as it relates to the restorative outcome, keeping soft tissue in perspective during the entire process. With this extra information at his fingertips, the user can accurately predict the final outcome and discuss possible alternatives with the patient before starting any procedure. The planning data then provides a basis for creating competitively priced surgical guides via siCAT, a Sirona subsidiary in Bonn, Germany. Thanks to Sirona Implant Software, CBCT workflow is now more efficient than ever before. Not only do Galileos users stand to benefit from Sirona Implant., but Cerec users as well. The software will be available to referring dentists. In other words, Cerec dentists who are referring patients to Galileos users can also reap the benefits of this new technology. Remember, this will be the platform to the next phase: Cerec custom zirconium abutment fabrication and perhaps, someday, milled surgical guides. Come join me in the Galileos Revolution!





