

# In With The **NEW**

High-tech additions make for faster, better, safer patient experience

For the second time since the fall of 2020, when he brought in Jayraj J. Patel, DMD, as his partner and eventual successor, Rajiv Patel, BDS, MDS, has expanded DeLand Implant Dentistry. The latest expansion is strictly a technological one.



To better serve patients, the practice recently added two tools that will not only allow the dentists to perform better work, but to also do that work faster and more safely.

The first addition is the *Waterlase iPlus*<sup>®</sup>, a versatile treatment system that greatly enhances the patient experience by using a combination of laser energy and water to perform tasks that previously required needles, drills or scalpels.

“Waterlase dentistry is one of the most advanced dental treatments available,” says Dr. Jayraj Patel. “Its patented technology allows us to be very precise in our work and makes for an exceptionally gentle dental experience.”

## Versatile Tool

The Waterlase system can be used in the preparation of cavities for fillings, to treat soft tissue or periodontal disease, and in the removal of tartar or decay from teeth or built up calculus from beneath the gum line.

Most dentists still use old fashioned tools such as drills and scrapers to perform those tasks. The result can include vibration or pressure that causes discomfort, pain and sometimes damage to the teeth.

The Waterlase system uses programmed combinations of light energy and water, which results in far less trauma to the teeth and gums. That allows for faster healing while also allowing the dentist to work on more than one part of the mouth in the same visit.

The Waterlase system is so gentle, in fact, that in some cases the dentist won't even need to use an anesthetic to treat a patient. The system also requires less water than traditional treatments and therefore results in less dental aerosol.

## Discount Dentistry

DeLand Implant Dentistry offers a membership program for individuals and families. Member benefits include free cleanings, access to prime appointment times, same-day emergency care and reduced fees for any dental work, with no limit on total treatment discounts. For information, call (386) 738-2006.

“Some people will ask, *How is it that this results in less dental aerosol?*” Dr. Patel says. “Well, it's because you're not using a drill, which runs at 40,000 rotations per minute and causes mechanical friction and therefore needs a lot of water to be kept cool.



The X-Guide 3D dental implant navigation system (shown here) is one of two new tools recently brought to the practice by Dr. Jayraj Patel, left.

“With less aerosol, there's less concern about COVID 19. The bottom line is, this device makes for a safer, gentler, more relaxing dental experience for everyone, including children, because it's allowing us to do much better work with pediatric dentistry.”

Because laser energy has proven to do a better job of disinfecting any area of the mouth, Dr. Patel has also incorporated the Waterlase system into his treatment plans for patients receiving *dental implants*.

Dental implants are screw-like bodies that are placed in the jawbone to serve as roots for replacement teeth. To aid him, Dr. Patel uses the other new tool brought to the practice, which he describes as a guidance system for implants.

“It's like a GPS system,” Dr. Patel says of *X-Guide*<sup>®</sup>, a 3D dental implant navigation system that allows specialists to scan a patient, plan their treatment and seat their implants with dynamic precision during a single visit.

“When placing an implant, the positioning is critical,” Dr. Patel explains. “That positioning is based on what is going to be placed on top of the implant, whether it's a single tooth or a bridge with several teeth, and what we have to concern ourselves with is not only how deep to place the implant but the angulation of it. By that we mean how far forward, backward, inward or outward it has to be placed so that the forces are transmitted properly along the root.

“Those five factors are what determine the survivability of the implant. Previously, we did this in one of two ways: we either did it freehand, where we used x-rays, CT scans and our skill, experience and feel as our guide; or we did it with guides created by a lab.”

Lab guides are custom made and can be quite costly, Dr. Patel notes. In addition, the patient and physician have to wait for the guides to be made before the implant can be seated in the jawbone.

When using a lab guide, there is also an element of trial and error involved in the placement of implants. Dentists often need to take and examine x-rays once or twice during the process to ensure they're seating the implant as precisely as possible.

“You don't have those issues with the X-Guide system,” Dr. Patel relates. “First of all, you don't need to wait for someone to make the guides, so it saves time. More importantly, this system provides live navigation that, in terms of precision, takes you to another level.”

## Show Me the Way

Implant dentists such as Dr. Patel get to that advanced level by merging a CT scan of the patient's mouth with the X-Guide system. The system then goes through a calibration phase that creates the path the dentist follows when seating the implant.

“With this system, you can very confidently place the implant close to critical structures such as nerves and sinus areas and be sure that you're not doing any damage to those structures while seating the implant in the best place,” Dr. Patel concludes.

“It's a much quicker and far more accurate system than any we've had before, and you can use it in every phase of the implant process. You can extract a tooth and immediately place the implant with this system. The system accurately guides you through that.”

For many patients, the X-Guide system will allow that work to be done in a single visit. That's good for the patient and the dentist, but it's just one of the reasons DeLand Implant Dentistry added the new systems.

“These technologies will help us work faster, better and more safely,” Dr. Patel says. “That's why we invested in them. It is all in an effort to do what's best for our patients and to provide them with the best possible care.”

© FHCN article by Roy Cummings. Photo and graphics courtesy of DeLand Implant Dentistry. mkb



## Call Today!

Rajiv Patel, BDS, MDS, and Jayraj J. Patel, DMD, are known for their exceptional, caring attitude toward their patients and work. They are committed to delivering the most advanced, personalized dental care while offering patients a uniquely satisfying experience. Along with the staff of DeLand Implant Dentistry, they welcome new patients and any questions concerning their range of services, including cleanings and preventive care, sedation methods, and cosmetic, restorative, prosthetic and implant dentistry. For an appointment, call or visit the office in DeLand in the Spring Oaks Professional Center:

150 McGregor Rd.  
(386) 738-2006

**Rajiv Patel, BDS, MDS**, has practiced general dentistry in DeLand for more than 30 years. He is board-certified in implant dentistry through his designation as a diplomate of the American Board of Oral Implantology/Implant Dentistry. Additionally, he is a fellow of the American Academy of Implant Dentistry and International Congress of Oral Implantologists. He is one of the select few general dentists certified to administer IV sedation in a dental office. He is a member of the Florida Dental Association, American Dental Association and Florida Dental Society of Anesthesiology.



**Jayraj J. Patel, DMD**, has been practicing general dentistry since graduating from the University of Florida College of Dentistry. His goal is to deliver comprehensive, compassionate care to his patients in a caring, comfortable and professional environment. He strives to provide advanced, personalized and complete care to each patient using the latest technologies and treatment modalities with an aim to build a long-term relationship based on trust, respect and friendship. Dr. Patel has extensive training in dental implant therapy through comprehensive courses such as the AAID Maxi Course from Augusta University Dental College of Georgia and the Comprehensive Implant Continuum from Implant Educators. He is a fellow of the International Congress of Oral Implantologists, an associate fellow of the American Academy of Implant Dentistry and a fellow of the Academy of General Dentistry. He is pursuing certification from the American Board of Oral Implantology/Implant Dentistry.



For detailed information about DeLand Implant Dentistry, visit [delandimplants.com](http://delandimplants.com)