

Understanding Occlusal Disorder

They often happen naturally and while they may not hurt, they can cause great damage

BY ROY CUMMINGS
Volusia Health Care News

What stands out the most about Maritza Longtin’s artwork are the brilliant colors she creates. The blazing reds, the vibrant blues and the gleaming yellows are so alive that they grab the eye and lure it into a scintillating, almost surrealistic landscape.

“Color is my passion; color and big canvases,” Maritza says. “I work in oils and acrylics and some of my work can be seen in a couple of galleries here in DeLand. Later this year, there’s going to be an exhibit of my work in a lawyer’s office in downtown DeLand. I’m very excited about that.”

A couple of years ago, if Maritza had tried to paint a picture of her oral health, it would have been a rather bleak one. The deterioration of several teeth in her lower left arch was the problem, and it caused her quite a bit of distress.

“That area became very sensitive, and when it becomes sensitive, you start chewing on the other side of your mouth, which is what I did,” Maritza says. “But that was a problem, too, because you’re not really chewing properly.”

“And with me, what happened was I started biting my tongue and my lip and the inside of my cheek, so there was a lot of pain. That was the thing that finally prompted me to go see Dr. Patel.”

Occlusal Disorder

Dr. Patel is Jayraj Patel, DMD, FAGD, FAAID, DABOI, of DeLand Implant Dentistry. He first met Maritza a few years ago after she was referred by her doctor. During his first meeting with Maritza, Dr. Patel quickly discovered the cause of her discomfort.

“The tooth that was supporting a long-standing bridge had failed, and as a result, the bridge was failing as well,” Dr. Patel reveals. “This is not an unusual situation. Over time, dental restorations can fail. But it’s critically important to understand why they fail.”

In Maritza’s case, Dr. Patel learned that the failures were due in part to an occlusal disorder known as *occlusal trauma*. This is the term dentists use to describe damage done to the teeth and/or their supportive tissue through excessive bite forces.

“The way our teeth touch, how long they touch and the amount of pressure that’s applied when they touch is very important for the long-term survival of our teeth,” Dr. Patel explains. “When that doesn’t happen right, we call it an occlusal disorder.”

“Occlusal disorder occurs naturally, and sometimes we don’t even realize it’s happening because there’s no pain. But



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Maritza is all smiles because at DeLand Implant Dentistry, she found a dentist she can trust.

occlusal disorder can lead to fractured teeth, sensitive teeth, gum recession, and things like failing crowns and bridges.

“That is what happened with Maritza, and to correct that, we extracted the failing tooth that was supporting the bridge and restored that area where the failing bridge was by replacing the teeth that were already missing there with *dental implants*.”

Dental implants are root-shaped, screw-like bodies that are surgically placed into the jawbone. Once in the jawbone, new bone naturally grows around the implant to form the foundation for an abutment and replacement teeth.

“In placing those implants, we not only need to ensure that we have proper room for the implants, we also need to make sure the occlusion is right,” the doctor says. “This is necessary to ensure the long-term survival of the implants, the new crown and any existing teeth.”

“An Amazing Dentist”

Dr. Patel completed that work on Maritza in 2021. In 2023, an upper right premolar broke. While examining that issue, Dr. Patel discovered that a lower right bridge was failing. Once again, he opted to replace the fractured premolar

with a dental implant and fabricated a new bridge to replace the failing bridge.

“And anytime that we replaced a restoration of hers, we made sure that the occlusion on the teeth that we repaired was proper and that none of those teeth were getting excessive pressure that would jeopardize the restorations,” the doctor adds.

“It’s very important to keep in mind that when we restore something, we can’t just place a cap or a bridge or an implant and say, *Now, nothing is going hurt you*. We must also ensure that the occlusion is right so that the restoration lasts.”

To do that Dr. Patel now uses an advanced tool called the *Tekscan™ occlusal analysis system*. This system provides digital images of the patient’s bite that allows the doctor to make corrections so that the restorations will last.

Tekscan, or T-scan for short, is a tool used for digital occlusal analysis. It provides dynamic occlusal measurement - revealing the level and timing of force on individual teeth and the occlusal stability of the overall bite.

T-scan can be used to protect crowns, bridges and veneers from high forces; ensure implants aren’t loading early; check contacts during active orthodontic treatment and improve efficiency by reducing the need for remakes of prostheses.

“We use that on patients with whom we see occlusal issues or signs or symptoms of cracking, gum recession and issues of that nature,” the doctor details. “In using this tool, we don’t change their jaw position or anything like that. We simply balance everything out.”

The work on Maritza’s upper arch was recently completed, and just as she was with the work that Dr. Patel did on her lower arch, she was thrilled with the outcome. It’s one of the reasons she and her husband have become regular patients of DeLand Implant Dentistry.

“We’re both members of the membership program there, so we both visit Dr. Patel twice a year for cleanings and checkups, and we’re very happy with his work,” Maritza says. “We really trust him because he’s very good at what he does.”

“He’s an amazing dentist, and we both trust him. He has a lot of patience, and if you don’t understand what it is exactly that he’s going to do for you, he will explain exactly what he’s going to do, how he’s going to do it and how long it’s going to take.”

“But it’s not just Dr. Patel who we appreciate. His entire staff is wonderful. And he has a real asset in Cathy who works the front desk. She’s a sweetheart, and she’s on top of everything. It’s nice to know you have someone like that to greet you when you go there.” ■

Meet the DOCTOR

Jayraj Patel, DMD, FAGD, FAAID, DABOI/ID



earned his dental degree from the University of Florida College of Dentistry. His goal is to deliver comprehensive and compassionate care

to patients in a caring, comfortable and professional environment. He provides personalized and complete care using the latest technologies and treatment modalities with an aim to build long-term relationships with patients based on trust, respect and friendship. Driven by a deep passion to help patients, he is constantly pursuing advanced training through continuing education courses. He has extensive training in implant dentistry through the AAID MaxiCourse from Augusta University Dental College of Georgia and Comprehensive Implant Continuum from Implant Educators. He is certified to perform IV sedation in the dental office. He is a diplomate of the American Board of Oral Implantology/Implant Dentistry, a fellow of the American Academy of Implant Dentistry and Academy of General Dentistry.



To Learn MORE

Call Today

Dr. Jayraj Patel is known for his exceptional, caring attitude toward his patients and work. He is committed to delivering the most advanced, personalized dental care while offering patients a uniquely satisfying experience. Along with the staff of DeLand Implant Dentistry, he welcomes new patients and any questions concerning the range of services, which include cleanings, preventive care, sedation, and cosmetic, restorative, prosthetic and implant dentistry. For an appointment, call or visit the office.

- » Where: Spring Oaks Prof. Center
150 McGregor Rd.,
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