

# Advancing the Future of Biological Dentistry

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January 05, 2025

## STORY AT-A-GLANCE

- › Biological dentistry takes a holistic approach, considering overall health and using advanced technologies like 3D computer beam computer tomography (CBCT) scans to provide more accurate diagnoses and treatments for dental issues
- › Mercury fillings pose significant health risks. Proper removal by a biological dentist is crucial to prevent complications like kidney function compromise and hormonal imbalances
- › Modern biological dentistry uses lasers instead of drills, reducing pain and the need for anesthesia. Ceramic fillings are preferred over composite resins due to their longevity and safety
- › Dental cavitations, areas of chronic infection often caused by improper tooth removal or root canals, are identified using CBCT scans and thermography, allowing for targeted treatment

***Editor's Note: This article is a reprint. It was originally published August 11, 2024.***

Dr. Carlo Litano has been practicing dentistry for nearly 20 years — his journey into this particular area of medicine began with a desire to help his mother, who was struggling with dental health issues.

*"I graduated school in Fort Lauderdale, and I didn't have enough skills to be able to help my own mother. It took about 10 years for me to feel comfortable to be*

*able to help her and move forward and keep moving forward on my journey," he says.*

One of his advantages was training with a holistic dentist mentor just as he was starting his career. He trained and practiced dentistry in Portland, Oregon, then returned to Florida after several years, where he established his holistic dental practice, Natural Smiles, in the Tampa Bay area.

*"I was lucky to have multiple mentors along the way to help shape how we deliver dentistry, but the advantage was I got so many perspectives," he says. "It was really the Swiss that put it all together into an integrated protocol, and that's with Dr. [Dietrich] Klinghardt, with Dr. [Karl Ulrich] Volz. And it's really changed the way we start, perform and follow-up on dental care."*

Litano clarifies the role of a biological dentist as compared to conventional dentists — basically, instead of looking at oral health as a separate component, biological dentists use a comprehensive, holistic approach, recognizing the connection between a patient's dental health and the rest of their body, including their organs and systems, as well as the health concerns that they are dealing with.

*"In biological dentistry, we don't look at the leaf, we're going to look at the whole forest. These people are coming in with multiple health issues that have been progressively getting worse, chronic disease," he explains.*

*"So, I start by looking at an X-ray, I start looking into their teeth, and then I start talking about their body. 'Hey, this tooth is connected to this group of organs. How's that going?' 'Oh, it's terrible.' 'Hey, your sleep patterns, your airway, how are you getting by?'*

*And these people are always tired and just chronically fatigued and their body is exhausted because it's putting up with a lot of barriers, infections that are preventing it from getting into that deep parasympathetic and being able to heal themselves."*

## **Litano Healed My Severe Dental Infection Years Ago**

I happened to meet Litano back in March 2020, when the COVID-19 pandemic was in its early stages. I had just returned from a health retreat in Mexico where they did some diagnostic work, including a dental evaluation. To my shock and surprise, they informed me that I had a dental abscess that needed remediation dental surgery as soon as possible.

However, travel restrictions were then put into place, and it was impossible to fly to other states to consult with qualified dental professionals. Thankfully, my good friend, Charlie Brown — who most of you know as the president of the Consumers for Dental Choice — introduced me to Litano, who did the surgical procedure for me and gave me an implant.

I was immediately impressed with his clinic, as it features several professional pieces of equipment that help provide an accurate analysis of your dental concerns. Today, their team caters to patients from all over the country and even other parts of the world.

*"Patients are coming in from other states. They're flying in from other countries. We get them assessed ... We triage primarily. What's the worst thing that can hurt them?"*

*We usually try to do metals first because we don't want healing when there's metal ions around, we're just going to make dirty bone. Our goal is to clear these obstacles, clear the metal, clear the mercury, clear the metal crowns that are blocking these meridians and hit the reset button so they can start healing,"* he explains.

According to Litano, once the cleaning and healing process begins, a noticeable change in their patients' chronic symptoms is observed, and they start to feel better. This is when they go into removing root canals, replacing them with implants and cleaning cavitations — however, they slowly build up the process, so the patients will be able to handle the changes.

## Using 3D Imaging to Help Diagnose Dental Problems

One marvelous tool in his clinic is the computer beam computer tomography (CBCT) 3D scan. Also called 3D Conebeam Digital Imaging, this high-tech equipment gives biological dentists the ability to provide more accurate dental diagnoses. In the U.S., less than 5% of dentists have this equipment in their clinic.<sup>1</sup> As explained by Litano:

*"[CBCT] gives me the ability to map the brain in 3D, like the whole skull. So, I'm looking at the jaw, the airway, masses in the jaw, how the upper teeth are ... We'll get a lot of infections on an upper tooth that goes into the sinus. So, this person's having ear problems, things like that. And we're able to slice the imagery in multiple planes, in multiple dimensions to catch things that would get lost.*

*Something common we find is they remove a wisdom tooth and they leave a root tip behind, they remove a root canal, they remove the piece of a root canal, it's still in there. So, it's still a source of inflammation embedded in the bone triggering autoimmune situations. And it's amazing all the stuff we find in people's jaws."*

Recent studies support the advantages of using CBCT in dentistry. One review<sup>2</sup> published in the Journal of Pharmacy and Bioallied Sciences highlights its benefits over traditional radiography, stating, "The diagnostic efficacy of CBCT has been demonstrated to be significantly higher than that of other modalities in accurately detecting complex oral and maxillofacial disorders."

Litano's clinic also featured equipment that eliminates the need to use traditional dental molds; instead, it uses digital analysis, like a 3D CAD (computer-aided design) scanner to create an accurate 3D model of a patient's mouth and teeth, that is then sent to the lab that creates the implants. This not only provides more precise measurements down to the last micron (or 0.001 millimeter), but also speeds up the production process.

*"It has cut down a lot of time ... The lab is digital, so they make a copy of the mould. So now you got a copy of a copy. [We] go direct from the source, we take*

*the impression in the chair, and it goes directly ... to our 3D printers and on the spot, things that used to take us two weeks now take us an hour."*

## **Most Dentists Are Not Trained to Remove Mercury Fillings Safely**

Litano and I also talk about amalgam fillings and the dangers of having a nonbiological dentist remove these for you – a mistake I made back in the '90s. Back then, I had a conventional dentist remove at least 20 of my mercury fillings, which was done incorrectly.

As a result, I experienced lifelong side effects, such as having a compromised kidney function as the fillings were removed with no vacuums, no rubber dams and no other precautions in place.

*"Mercury fillings, beyond being metal, are 51% mercury, and metals are conductors, so the way they affect the body is very severe. They still do mercury fillings on kids, and less on adults now, but every other day I'm removing mercury. I remove crowns, and ... underneath is a mercury filling," Litano explains.*

*"So now you got a positive novel metal sitting on top of a negative mercury metal, and you got your own little battery on the stomach meridian right here. And then a year later a patient gets IBS or some other condition. A lot of times it's front teeth on women and it [causes] infertility, irregular periods."*

In his practice, Litano also use oracle ceramic fillings made of silicon dioxide, which is either derived from sand or glass. They have shied away from white composite resins, as they are plastic petroleum derivatives that emit bisphenol A (BPA), which are endocrine-disrupting chemicals that can have far-reaching effects on your hormones and reproductive health.

A 2023 analysis<sup>3</sup> published in Cureus highlighted the potential cytotoxicity of dental resin composites, noting:

*"Despite being a very promising dental material, its monomeric component has some drawbacks. It is well known for leaching out during incomplete polymerization, which can result in cytotoxicity. Bis-GMA (bisphenol A-glycidyl methacrylate) is the most cytotoxic of all monomeric components that exhibit synthetic estrogenic effects."*

Litano explains that composite resins also break down much quicker than ceramic fillings. "They have issues with after 10 years, the margin starts to break down. The filling is fine, but the bond starts to break, and then we'll get this little microscopic gap that bacteria and bugs will get into," he says. On the other hand, oracel ceramic fillings may last up to 20 years.

## **New Dental Techniques Give Patients a Pain- and Stress-Free Experience**

Litano also shares that his team hardly uses the drill anymore; instead, they use what's called Erbium and Nd:YAG lasers, which are less invasive and, since they use light, more quiet. He explains:

*"[T]he Erbium laser, it's a burst of energy, kind of like if you hold the candle, it's going to burn, but if you go around it, it doesn't burn. So, this has some really cool thermal properties that I'm able to drill, create holes into bone without drilling.*

*A drill removes teeth through friction, and friction creates heat. So sometimes it's not the violence of it, but the thermal buildup in the tooth hooks the nerve and it dies ... a month or two months later.*

*The laser of the light is tuned to water. There's water in between the cells of the teeth, between the crystals, and it's targeting the water behind it. It pops off. It's not burning, it's not vaporizing. And then when you get to the bottom of the cavity, the sound changes."*

Another advantage of these lasers is they only require mild anesthesia, even with big surgical procedures. "A lot of people go to the dentist and they get an injection. They're fine with the dentistry, but it takes them a week to recover from the injection," Litano says.

Along with these modern advances, Litano also gives room for more traditional techniques in his toolbox, such as thermography. He uses it to map out cavitations, which are areas of chronic infection that occur after a root canal or if wisdom teeth are improperly removed.

*"I've been exposed to dental cavitations over 10 years. One of my mentors in Clearwater tuned me to it, and then I followed other mentors in Ohio and Washington. It's a reservoir of toxicity.*

*So, people will have a root canal on their last tooth. And the root canal has been releasing toxicity for a long time, and the body ends up storing that toxicity in a pocket of bone where wisdom teeth were improperly removed. So, this is a source of inflammation.*

*[T]he CVCT maps the cavitations, so I can see the cavitation. Great, but is it active? Some people can't handle these surgeries. It's expensive and it's invasive. So then a tool that I've been relying on is thermography.*

*And when we do that, we're able to see that out of those four cavitations, only one of them is active. You still have cavitations, but this one seems to have a hot area, chronic inflammation that's more active ... Let's go ahead and focus on that one and see if we can get some resolutions.*

*And then we just have the patient follow up on their thermography every two years, schedule to see if we need to do any additional surgeries. So we try to keep less surgeries more."*

## **Resources to Help You Find a Biological Dentist**

Don't settle for amalgam — you have a choice! The following organizations can help you find a mercury-free, biological dentist:

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### Consumers for Dental Choice

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**Dental Amalgam Mercury Solutions (DAMS)** — Email them [here](#) or call 651-644-4572 for an information packet

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### Huggins Applied Healing

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### International Academy of Biological Dentistry & Medicine (IABDM)

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### International Association of Mercury Safe Dentists

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### Talk International

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## More Information

In addition to these advances, Litano and I discussed other holistic strategies that may help maintain oral health, such as the importance of your diet, your body's pH levels and your vitamin D levels. I encourage you to watch this interview in its entirety, as it offers valuable insights on the advantages of consulting with a biological dentist.

If you are in the Tampa Bay area and are looking for a biological dentist, I encourage you to visit Litano's clinic, Natural Smiles, located in downtown St. Petersburg across from Mirror Lake. You can also go to their website, [Natural-Smiles.com](http://Natural-Smiles.com), to learn more about their services. Lastly, remember to share this information with your family and friends, to educate them about the importance of choosing biological dentistry.

*"I've been at this for a long time and I thought more dentists would be catching on. I wish it continues to happen," Litano says. "There's not enough of us for the population that we have, the amount of chronic disease and long-term bad fillings and bad stuff out there. There's not enough of us. So, our reach and education is a big deal."*



## Sources and References

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- <sup>1</sup> Natural Smiles, 3D scan (CBCT)
- <sup>2</sup> Journal of Pharmacy and Bioallied Sciences 16(Suppl 1):p S38-S40, February 2024
- <sup>3</sup> Cureus, 2023, 15(10): e46327