Biolase could become the next Intuitive Surgical
An interview with the company’s CEO Federico Pignatelli

Tech that is potentially going to radically transform the way dental surgery is performed and practiced. As a new step in informing the marketplace about WaterLase, we have recently embarked on a social media and press campaign to reach out to millions of patients to educate them about the many advantages of being treated with BIOLASE’s technology.

We are glad to have Dr Fred Moll, the co-founder of Intuitive Surgical, who values our technology such that he joined our board of directors recently. He is a legend in the medical field because with his company he transformed the way surgery is approached through the use of robots. Thanks to a visionary like him, today tens of thousands of patients with cancer can be treated in a much more precise way than ever before.

We believe BIOLASE has a technology that is so advanced and revolutionary that the company could become the next Intuitive Surgical. That is because with WaterLase technology we can transform surgical dentistry for hundreds of thousands of dental practices around the world, while providing better and safer care for patients.

Why do you think lasers and particularly WaterLase will be the technology of choice in dentistry for the future?

If you think about it, dentistry has not really changed very much since the dental drill was invented by the Egyptians 7,000 years ago. The principle of removing tissue by mechanical rotation has remained the same since that time, with the only major change in the past 70 years being the attachment of a high-speed engine. With WaterLase technology, we are able to make use of the most basic element of human tissue, water.

The human body in its entirety consists of 68 per cent water, so water can be found in almost all tissue. Dentine, for example, has 20 per cent water in it. By energising water molecules with a laser, tissue can be cut without pain, heat, abrasion, vibration, or the risk of microfractures. At the same time, it is also much more precise. Clinically, this is much better dentistry.

Furthermore, there is no need for an anaesthetic for the patient; 99 per cent of patients can be treated without using Novocaine. How wonderful is that? On top of that, laser energy kills bacteria, viruses and fungi, and that provides another advantage for dentists, since it is almost impossible and certainly very costly to have surgical instrumentation like dental burs and endodontic files fully sterilised, and too costly to reuse new instrumentation for every patient to be treated.

With all these advantages, why do you think the technology has not been adopted widely by dentists yet?

That is not exactly true. Since the introduction of WaterLase technology 15 years ago, we have sold over 10,000 units worldwide, 6,000 of which were in the USA alone. The main challenge however is education. Dentists need to be better educated about the treatment and cutting of soft tissue, which is something a dental drill cannot do. These additional options mean that dentists no longer need to refer patients to a specialist for these tasks, thereby boosting revenue in the practice.

Where do you see the technology in the next five to ten years?

In contrast with other market-leading systems or technologies, such as Sirona’s CEREC, WaterLase is protected by over 100 patents, which will allow us to protect our competitive advantage. The adoption cycle of new technologies is growing increasingly shorter and more advanced technologies like WaterLase will rapidly find their way into dental practices. Dentists that do not upgrade their practices will likely begin to lose patients, become uncompetitive and lag behind. You cannot fight technology; you cannot fight innovation. If you do, you are doomed to be left out of the market.

Thank you very much for the interview.