We are currently undertaking more revolutionary projects

An interview with Mectron, the company that invented Piezosurgery

By Daniel Zimmermann, Group Editor
Dental Tribune International

Mectron, based in Italy, has revolutionized dental surgery with their development of piezoelectric bone surgery. Recently, the company presented the third generation of their Piezosurgery device at the International Dental Show (IDS) in Cologne, Germany. We spoke with company founders Domenico Vercellotti and Fernando Bianchetti, as well as area managers Wolf Narjes and Alexandre Cadau, about the clinical advantages of their invention and how the company is reacting to the current market conditions.

Market prospects for 2009 are rather uncertain due to the financial crisis. Is your company prepared for a potential economic slowdown?

Fernando Bianchetti: The only way to withstand this crisis is to remain successfully in the market through investments in scientific and technical research in Europe and other countries.

Domenico Vercellotti: What Fernando just said has always been our corporate philosophy; it will certainly help us in difficult times like this. Mectron offers high-quality products at reasonable prices, and puts a lot of effort into the development of new technologies and not merely into expensive marketing campaigns.

Wolf Narjes: Being a family-owned company, Mectron is probably more flexible and manageable than larger companies. Therefore, we can react relatively quickly to unexpected market changes.

Have you already experienced an economic climate change in Italy and other markets?

Fernando Bianchetti: Since our company was founded in 1979, we have already had to go through occasional tough economic times. However, nothing really compares with the latest financial crisis.

Alexandre Cadau: Fernando is right. At the moment, we are experiencing a huge loss of confidence in all consumer groups. On the other hand, we have always been challenged by the depreciation of various foreign currencies, like in 1992 when devaluation hit many countries.

Your company is mainly known for its innovative Piezosurgery technology. What are the main advantages compared to traditional surgical technologies?

Domenico Vercellotti: Mectron invented piezo-electric bone surgery in collaboration with Prof. Tomaso Vercellotti almost 10 years ago. Back then, it was not just another product: it was a significant innovation in the field of dentistry based on technical expertise and years of clinical research. Thanks to Piezosurgery, oral surgery evolved from traditional rotating instruments to a new system of cutting bone that spares soft tissue and accelerates the healing process.

Wolf Narjes: Our Piezosurgery device is scientifically approved and we are considered to be the only company in this field to have a clinical database on each available surgical instrument. All the clinical applications for the device have been studied to ensure that there is no risk for users and patients and that the medical effects are always positive. Many companies have attempted launching similar products, but they are still missing scientific data or research regarding the effectiveness of their methods.

Would you tell us more about how Piezosurgery was developed and how it has been received in different markets?

Wolf Narjes: I have found that several countries, including South Korea, Italy and Germany, have been very open-minded to this new technology. Most Scandinavian countries, however, have only begun to understand how to use this innovative technique.

Fernando Bianchetti: All the clinical protocols and techniques developed for Piezosurgery are based on scientific publications endorsed by universities and credible specialists in the field of dental surgery. They confirm not only the benefits for the clinician, such as maximum surgical precision and wider intra-operative visibility, but also those for patients who suffer from less postoperative pain.

Alexandre Cadau: Piezosurgery has certainly been one of the most important developments in the dental and medical field. This unique device allows the surgeon to work in less stressful and safer conditions. Postoperative healing times are also reduced threefold with this method.

Domenico Vercellotti: The latest innovation is tips for the implant site preparation that have demonstrated histological benefits and a better osseointegration of implants compared to the traditional twist drill (Giulio Preti et al., Cytokines and Growth Factors Involved in the Osseointegration of Oral Titanium Implants Positioned Using Piezoelectric Bone Surgery Versus a Drill Technique: A Pilot Study in Minipigs, Journal of Periodontology, 78 (2007):716–722).

Training courses are regularly offered at the Piezosurgery Academy in Italy. Do you also offer courses in other parts of the world?

Domenico Vercellotti: Piezosurgery Academy was established by Prof. Tomaso Vercellotti to give scientific support to piezoelectric bone surgery. It is managing the whole clinical research and training activities in piezoelectric bone surgery and works independently from Mectron.

Wolf Narjes: It is essential to
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be suitably trained in this technique. Therefore, we offer courses in Europe, Asia as well as North and South America. Last year, we opened a new branch in Phuket in Thailand that serves as the Piezosurgery training centre for the entire Asia Pacific Region.

Alexandre Cadau: There is a reason that training is crucial for Piezosurgery. Users experience a steep learning curve before getting used to the micrometric movement of Piezosurgery, which is completely different to the traditional techniques. We organize workshops in many countries around the world that help dentists learn the differences between Piezosurgery and conventional burs and saws.

In addition, we collaborate with universities, to offer attending clinicians cadaver dissection courses that help them appreciate the surgical benefits.

With four regional headquarters, do you consider yourself a global cooperation?

Fernando Bianchetti: Certainly, our branches in Germany, India and the Asia Pacific region report to our headquarters in Italy. In other countries, we have worked successfully with local dealers for almost 10 years, in some countries even 20 years.

Wolf Narjes: If you mean: are we represented in all the important countries around the world, then definitely yes. Our network is well established in more than 80 countries, and our sales team is working daily to extend it even more.

How closely do the regional headquarters work with the headquarters in Italy?

Domenico Vercellotti: In Mectron’s corporate organization, the regional headquarters represent points of information exchange and contact between the headquarters in Italy and local clinicians.

Fernando Bianchetti: They work very closely with our main headquarters in Italy for different reasons. Mectron Italy helps the regional headquarters and, of course, our other distribution partners, to provide their customers with technical support. The staff at regional headquarters, as well as our distribution partners, are regularly trained by our engineers in Italy.

Alexandre Cadau: All Mectron partners receive marketing support through the headquarters in Italy. In this way, we ensure that all our staff and partners, whether an Italian dealer or South American distributor, keep up to date with the latest specifications and developments of our products.

Wolf Narjes: I have to add that although marketing is centralized, the structure of our company is still flexible enough to fulfil local demands.

Do you have offerings in other market segments as well?

Fernando Bianchetti: Let’s speak about the other products Mectron has been manufacturing for plenty of years like piezoelectric scalers, curing lamps and air polishers. Mectron was the first company to introduce on the market a scaler handpiece in titanium that has represented the new state of the art in life span and sterilization, as well as the first one to launch a LED curing lamp!

Wolf Narjes: Mectron has a lot of capacity for renovation. Therefore, our company is not only a leader in the field of the Piezosurgery technique, but also in the light curing segment.

Alexandre Cadau: We say we have succeeded to be a long-term market leader. As far as the production of LED curing lights is concerned, our company is still one of the biggest manufacturers worldwide.

Many companies are starting to extend their range of products. Are there any new products being developed that you would like to talk about?

Fernando Bianchetti: Apart from the further improvement of existing products, we are currently undertaking more revolutionary projects in our R & D department. A total of 15 percent of all staff working at Mectron are actually involved in this.

Domenico Vercellotti: Our mission is to implement new technologies for the dental market that are based on the latest evidence-based research. We will also stay on this track in the future to develop innovations that are economical and bring true clinical advantages.

‘Piezosurgery has certainly been one of the most important developments in the dental and medical field.’