ISMI and IAOCI join forces

Drs Sammy Noumbissi (US) and Karl Ulrich Volz (Switzerland) are two of the most experienced surgeons worldwide when it comes to modern one-piece and two-piece ceramic implants. In the past 20 years, the two combined have successfully placed several thousand ceramic implants. Moreover, they are the founding presidents of the first two international expert societies for ceramic implantology—the International Academy of Ceramic Implantology (IAOCI) and the International Society of Metal Free Implantology (ISMI). *Ceramic implants* had the opportunity to interview the two about future joint activities.

Editorial note: The ISMI initially planned to hold its 2020 annual congress in May in Berlin, for the first time in cooperation with the IAOCI. Owing to the current COVID-19 pandemic, however, the decision was made to postpone the event to 2021 and it is now set to take place on 7 and 8 May 2021 in Düsseldorf. For more information, contact the organiser at events@oemus-media.de.

Drs Noumbissi and Volz, you two have been friends and colleagues for many years. Now, the IAOCI has also officially joined ISMI as an educational partner for its 2021 annual congress. What's the main reason behind you two joining forces?

Dr Volz: Sammy, whom I extremely respect as a great surgeon, ambitious teacher and very honest friend, is truly committed to pushing the paradigm shift regarding ceramic implants forward. He dedicates and commits himself entirely to his expert society, the IAOCI. Yet, ceramic implants represent only a small share of the entire dental implant market. It thus makes a lot of sense to join forces and to support each other in our activities and conferences. ISMI will be organising congresses in the German-speaking countries and in northern Europe, and the IAOCI will take care not only of the US but also of Latin America, Africa, Australia and possibly Asia.

Dr Noumbissi: We have worked and supported each other as individuals but also as associations for the last ten years. The IAOCI from its creation had global ambitions, which we continue to work toward achieving. ISMI had the fortune of being founded and led by Ulrich, who is a man with a broad vision and a lot of perseverance. We are joining forces at this stage because a lot of the groundwork laid by ISMI and the IAOCI to educate our colleagues and the general public is now yielding positive results. I can confidently say that, had we not had the courage and temerity to push forward with our respective goals, ceramic implants would not have drawn the attention and interest we are seeing now. If you look at the ceramic implant market today, it constitutes no more than 2 % of the global implant market, as manufacturers are just starting to understand that there is a demand and even a need for metal-free implants. Therefore, as the leaders in the field, we thought that it would be best to join forces to adequately educate the world on ceramic implants, because we believe that there is a need for a uniform and organised message. Academic institutions, researchers and the industry respond better to firmly established and well-organised groups. This is why we now offer ISMI and IAOCI members a dual membership programme and we aim at aligning our educational initiatives more strongly in the future on the basis of shared educational standards. Against this background, ISMI's Curriculum for Biological Dentistry is now also fully recognised by the IAOCI.

IAOCI | International Academy of Ceramic Implantology

Dr Noumbissi, you formed the IAOCI in 2011. What were the reasons for founding an academy that is solely dedicated to ceramic implants?

Dr Noumbissi: When I introduced ceramic implants in my practice, I was one of ten or 15 dentists in the Americas who were placing ceramic implants. Even though I am a trained implantologist, the start was not easy because there were no firm guidelines, and documentation was scarce and was for the most part produced by manufacturers of the few systems available at the time. Ceramic implants, although they look like their counterparts, require a tremendous amount of attention to detail in all phases of treatment. Biology, physiology and immunology, to name just a few, are important factors to take into consideration if one wants to be successful with ceramic implants. Furthermore, research findings and unbiased literature were hard to come by. There was a big void for the early adopters, so we had to learn from one another and do so quickly, because the demand for metal-free implants was and continues to be mainly driven by patients, rather than dentists. The only way to meet these initial challenges was to organise ourselves.

Many clinicians would approach me and Ulrich asking for training courses and resources. These are some of the few reasons that played a great part in the creation of the IAOCI; we wanted to create an environment in which dentists could freely share with one another their experiences, but above all get proper training and knowledge about ceramic implants. We wanted to create an ecosystem in which clinicians, manufacturers and researchers could exchange, communicate and contribute to one another's growth. Seven years into the academy's existence, we created the Zirconia Implant Research Group, whose objective is to give some direction to the science, improvement and development of ceramic implants. ISMI has done the same: they—in some cases collaboratively with the IAOCI—are conducting important research projects across the globe in order to properly document and scientifically consolidate daily clinical facts long proven and accepted by early adopters and clinicians.

ISMI | INT. SOCIETY OF METAL FREE IMPLANTOLOGY

Dr Volz, founded in 2014, ISMI is the first expert society for ceramic implants in Europe. What is ISMI's approach to modern-day dentistry?

Dr Volz: Dental implantology actually started with ceramic implants, and Prof. Willi Schulte, the inventor of the first ceramic implants, wrote me a personal letter shortly before he passed away in which he said that, at the beginning, he received no approval to compare his ceramic implants with titanium implants because at that time the relevant ethics committee didn't expect them to be safe. Titanium intolerance is expected to be somewhere between 10 and 25 %, and according to the 2006 European Consensus Conference, the rate of peri-implantitis is around 50 %. This peri-implantitis tsunami has become one of the main topics at all mainstream implantology congresses. Even the U.S. Food and Drug Administration launched an investigation in November 2019 not only into amalgam but also into metal-containing implants. According to the latest studies, ceramic implants are at least as good as their titanium counterparts in terms of osseointegration, success rate, bone loss and overall stability. They even outperform them significantly in terms of soft-tissue reaction and aesthetics, and no intolerance or peri-implantitis occurs with them. Employing ceramic implants as an alternative in the daily practice has become a feasible option for many well-known surgeons all over the world, especially those with an affinity for biological dentistry, which I predict will become a new megatrend in dentistry in the future. Prof. Ghanaati also states that we dentists need to put an increasing focus on biology in dentistry. ISMI is an organisation which not only ad-

dresses ceramic implants as its main topic, but focuses on biology and immunology as well.

Comparing the situation of ceramic implants in the early days, when you started working with them, to today's ceramic implantology, what are the main differences? Are there any at all?

Dr Volz: Of course, there are! When I started placing my first ceramic implants back in 2000, I had only a few followers. Both the majority of dentists and the industry considered me a threat, and I was verbally attacked after all my lectures at orthodox forums. Only last year there was a great change, since all the big titanium companies launched their own ceramic implant systems. When I talked at the first ceramic congress of the renowned NEUE GRUPPE in Cologne, there was a clear consensus at the end of the event that identified ceramic as rightly comparable to titanium—and even better when it comes to aesthetics and soft-tissue reaction. At my lecture at the German Association of Dental Implantology (DGZI) conference one month later in Munich, I was well received and had the feeling of having advanced from being an outsider to being an insider.

Dr Noumbissi: When I started placing ceramic implants, they were only available in one-piece configuration and their surfaces were either sandblasted or acid-etched. The options were limited. The last six years has seen a rapid evolution in both the manufacturing and design of zirconia implants. We now have two-piece implant systems with screw-retained abutments. We can now treat partially and completely edentulous patients. The success rates of ceramic implants are now on par with those of titanium implants. For me, the major change has been patient preparation and case planning. Ceramic implants, by virtue of the material, require healthy bone as a precondition for achieving good and consistent results. Healthy bone and healing can only be found in healthy patients, especially from a systemic point of view.

How have your peers reacted when introduced to the handling of ceramic implants for the first time?

Dr Volz: Most of them were quite critical at first, which is due to the deeply entrenched misunderstandings they adopted over the last decades regarding ceramic implants, but once they begin to understand that ceramic is different, much easier to handle and safer, they tend to become enthusiastic about ceramic implants and their biological approach. If you gave me just two hours, I would be able to convince any surgeon. The benefits are just so obvious.

Dr Noumbissi: The most difficult obstacles for a clinician are first to get past the fact that implants made of ceramic can endure the rigours of the oral environment, second to understand that it is a better and safer material to be implanted, and third to understand that, before he or she considers placing a ceramic implant, he or she should apprise himself or herself of the patient's general health. In my view, it is a transition a clinician must be willing to make because, although the actual placement of ceramic implants is the same as with titanium implants, they are most successful when planning includes the patient as a whole. Finally, once the implants have been placed and are ready to be restored, dentists almost always marvel at the health and quality of soft tissue around the implants. Then they realise that they are working with very special material.

Patients' happiness and their feedback play a crucial role in evaluating whether treatment has been successful or not. How have your patients reacted after being treated with ceramic implants?

Dr Volz: If you ask patients what kind of material they prefer to be used in their mouths, they will almost always go with the metal-free option. This is backed by a survey that was done by Straumann, which showed exactly this result. For one thing, patients feel better after being treated with non-metal solutions, owing to a positive effect on psychoneuroimmunology. In addition, by following the biological approach, patients mostly feel better overall. They show fewer holistic symptoms, and they have more energy in general. At our clinic, we are currently conducting a study to prove these changes by measuring various parameters before and after treatment: HRV is measured with a validated device, and eye vision, length of the telomeres and mitochondrial function are measured by means of validated programmes. Moreover, we administer a validated medical symptoms questionnaire. When comparing the photographs of patients' faces before and after their treatment, one can see that they look totally different. These results were presented for the first time at a joint meeting in Dallas in March where the top four biological dental and medical organisations have been working together. Actually, this event was the trigger to talk to the president of the IAOCI, Sammy, in order to join forces and make us stronger together.

Drs Volz and Noumbissi, thank you for your time.

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