

Dental professionals from around the globe

To gather in Las Vegas next June



Nobel Biocare invites dental professionals from around the globe to join its upcoming Global Symposium, which will be held from 27 to 29 June 2019 at the Mandalay Bay Hotel and the Convention Center in Las Vegas. The event will offer a great number of lectures, master classes and hands-on sessions, as well as original solutions that range from smarter implant designs and site-preparation techniques to new digital solutions designed to further

enhance the patient treatment. The upcoming event will feature a change of location and venue. Significantly expanding in size, it will welcome up to 3,000 dental professionals from around the globe. The scientific committee, led by Dr Peter Wöhrle from the US, comprises many renowned experts in implant dentistry and oral rehabilitation. The programme will, furthermore, feature a large number of expert speakers

consisting of world-class researchers, clinicians and laboratory technicians. Moreover, participants will be given the opportunity to choose different streams to create an individualised programme tailored to their own interests and treatment goals. You can now register for the 2019 Nobel Biocare Global Symposium online.

**Source: Nobel Biocare**

Future “Simplantology”:

The convergence of evidence and digital innovation

From 18 to 19 October 2018, Alpha-Bio Tec hosted a two-day educational congress for European customers in Monte Carlo, Monaco. The congress, designed for global dental professionals, was an opportunity to share implant expertise. In addition, the latest trends in the implantology market were presented. Dental professionals from around the globe were exposed to various topics related to advanced 3D imaging and CAD/CAM technologies. Participants had the opportunity to learn from comprehensive clinical cases, as well as evidence-based advanced treatments and techniques. Alpha-Bio Tec also addressed the company's

core value of “simplantology”, based on the convergence of scientific evidence and digital innovation. Yuval Grimberg, General Manager at Alpha-Bio Tec, stated in his congress speech that the company's focus is on providing dentists with simple solutions that aim for good aesthetic results. The company is continuously developing products and providing international training and educational programmes, thus delivering on the demand for patient-oriented solutions.

**Source: Alpha-Bio Tec**





Researchers trial new protocol for

## Management of peri-implantitis

Peri-implantitis is one of the most frequently occurring pathological conditions that dentists and dental hygienists face. So far, however, there is no gold standard of treatment, nor randomised clinical trials in the literature comparing surgical and non-surgical treatment. Italian scientists have now found promising results with a new non-surgical protocol in their study, titled, "A new multiple anti-infective non-surgical therapy in the treatment of peri-implantitis: A case series".

The researchers, led by Dr Magda Mensi, Assistant Professor of Periodontology, Oral Surgery and Implantology at the University of Brescia in Italy, embarked on a pilot study in 2013 to determine whether a combination of low-abrasion powder, topical antibiotic and curettage could be more effective against severe peri-implantitis than conventional mechanical debridement. Mensi thus developed the multiple anti-infective non-surgical therapy (MAINST) protocol and utilised it on 15 patients with dental implants affected by peri-implantitis. The patients underwent quarterly maintenance sessions and were instructed to use personalised home care instruments, like sonic toothbrushes and floss. "The patients have to be educated in plaque

and calculus removal, motivated to carry out this maintenance at home, and show up for their dental sessions. If they come back only when there is a problem, it will be too late," Mensi emphasised.

After 12 months of continued observation, a 4.0 mm reduction in probing pocket depths, an attachment level gain of more than 3.7 mm and a bleeding on probing rate of only 6.5 per cent were observed. The implant survival rate was 100 per cent. Mensi added that the results of the study so far indicate that the MAINST protocol could become the gold standard of treatment for peri-implantitis. A randomised control study shall validate this hypothesis.

**Source: DTI**

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Microthreaded dental implants promote

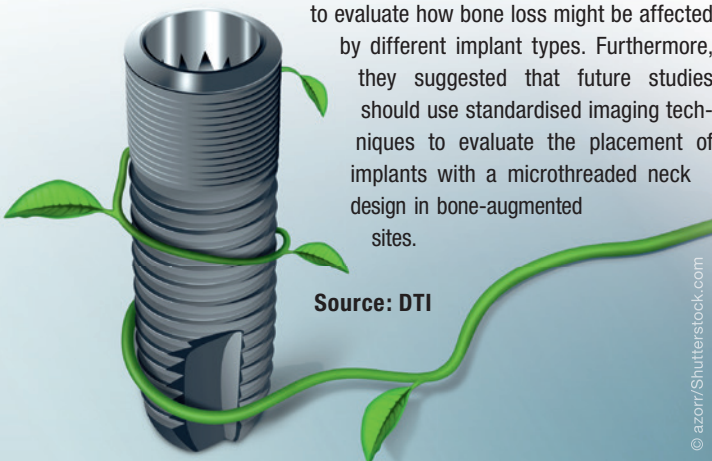
## Crestal bone preservation

Researchers from the University of Kentucky, USA, and the University of Dammam, Saudi Arabia, investigated the impact of a microthreaded neck design in implants on crestal bone preservation, which is essential for implant stability. For the study titled "Microthreaded implants and crestal bone loss: A systematic review" 23 articles published between January 1995 and June 2016 and obtained via relevant keyword search on three electronic databases were analysed.

As a result of the analysis the scientists concluded that the addition of deeper threads on the implant allowed for greater stabilisation between the implant and the bone, especially with weaker bone. Further it was found that less crestal bone was lost with dental implants that had a microthreaded neck design than with those with a machined surface or conventional rough surface. The findings demonstrate that geometry does affect the amount of stress and strain on the implant, shape may thus contribute to better primary implant stability.

The researchers recommended additional trials to evaluate how bone loss might be affected by different implant types. Furthermore, they suggested that future studies should use standardised imaging techniques to evaluate the placement of implants with a microthreaded neck design in bone-augmented sites.

**Source: DTI**



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Dragonfly-inspired implant design shall

## Prevent post-surgery infection

Cell biology researchers are partnering with nanotechnology experts to fight post-surgery infection by creating implants based on dragonfly wings. Working with leading surgeons and an Australian orthopaedic medical device company, researchers from the University of Adelaide and University of South Australia will use nanomodification technology to reduce the risk of infection after surgery.

The bacteria-destroying qualities of the dragonfly were first identified by Australian scientists who observed bacteria being killed on the insects' wings, characterised by tiny spikes—nanopillars—of about one thousandth of the thickness of a human hair. The researchers are thus carrying out diverse experiments to test whether mimicking the nano-patterns of the dragonfly wing on implants can kill harmful bacteria that cause infections. The four-year project could achieve a critical breakthrough in the global fight against antibiotic resistant bacteria. The researchers from the Adelaide-based institutions will combine their expertise to create titanium implants with the dragonfly wing surface while confirming their safety and testing their bacteria-killing properties. The new technology could thus be of use in any field where surfaces are subject to high levels of bacteria.

**Source: The Lead South Australia**



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