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## Peri-Implantitis Matter: Possibilities of Treatment but without A Strong Predictability for Solution

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Dental implants are one of the revolutionary tools in the rehabilitation of patients' functions and esthetics, presenting high long-term success rates. In 2015, it was estimated about 3 million people in the US on having dental implants and it is increasing by 500,000 per year, solely in the US. Despite the high survival rate at 10 years (around 96%),<sup>1</sup> there is a risk for complications, such as peri-implantitis.<sup>2</sup> It is an inflammatory disease, commonly a plaque-associated condition, affecting directly the Osseo integrated implant and the local tissues. Thereby, the evolution of peri-implantitis has been considered as one of the most common reasons for implant failure.

Prevalence of peri-implantitis is almost 20% upto 14-years after implant placement and typical signs and symptoms may include saucer-shaped with vertical crestal boned estruction, peri-implant pocket, bleeding on probing (BoP), mucosal swelling, hyperplasia, and an acute infection pain, but generally, it is a symptomatic.<sup>2</sup> There is a general concern related to its incidence, which may be associated with poor plaque control, lack of regular maintenance, and history of severe periodontitis, leading to highlight another important question: the efficiency of the available protocols to treat this disease.<sup>3</sup>

Thus, there is an arsenal of alternatives to try solving this question, which can range from basic/fewer invasiveness therapies (infection control, nonsurgical debridement) to advanced procedures (corrective/ respective or regenerative/augmentative surgical procedures when/where necessary, and supportive therapy).<sup>4</sup> Thereby, after a correct diagnosis, the primary objective must be to modify the local microbiota at the implants' surface, pursuing the total elimination of pathogenic bacteria as the most effective approach.<sup>4</sup>

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Nevertheless, an efficient mechanical debridement is difficult to achieve,<sup>4</sup> which has been associated with adjunctive non-surgical therapies (drugs, antiseptic rinses, laser, and photodynamic methods). In addition, non-surgical methods did not reduce the probing depth (PD) but were effective at reducing soft-tissue inflammation.<sup>5</sup> Therefore, surgical procedures have been suggested as more effective at reducing both PD and BoP.<sup>5</sup>

Although scientific evidence on the therapies' efficacy to treat peri-implantitis is limited, clinical evidence suggests that it is predictable when diagnosis and intervention must be made as soon as clinically possible.<sup>4</sup> Thus, it is recommended to re-assess (probing and radiographic analysis) at maximum within 2 years, but if needed in each 6 months, because is unpredictable to know the onset and standard of progression of the disease. Also, it has been recommended for clinicians do not forget probing (baseline measures) and radiograph the implant after completion of the implant prosthesis.

In conclusion, it is recommended professionals make effort and have attention to health and peri-implantitis conditions, to keep focus on treating accurately the patient. Furthermore, it is recommended more high-level clinical trials, such as randomized controlled trials (RCTs), to find the best strategy and treatment performance. Peri-implantitis matter, its increase is notable, and its total solution needs to be improved.

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