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TwinLight® Peri-implantitis Treatment

A simple and effective procedure that offers the power to treat peri-implantitis – an increasing threat to oral health.

- Minimally-invasive technique
- Fast regeneration/healing
- Reduced inflammatory response
- Highly effective treatment
- No antibiotics needed

Available only with LightWalker®

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95756 CE ENG/1

Removal of the soft-granulation tissue and ablation of the infected bone with Er:YAG

Removal of the bacterial biofilm on the implant surfaces with Er:YAG

Bacterial reduction and biostimulation of the bone tissue with Nd:YAG

What is TwinLight® Peri-implantitis Treatment?

TwinLight® is a minimally invasive peri-implantitis treatment combining dentistry's two best laser wavelengths: Er:YAG and Nd:YAG to significantly enhance treatment success rates and shorten healing time.

How does TwinLight® Peri-implantitis Treatment Work?

Er:YAG laser is used to remove microbial composition and to treat the damaged alveolar bone around the implant. It is suitable both for peri-implant mucositis and peri-implantitis treatment, in which case the Nd:YAG laser is also used for bacterial reduction and biostimulation, as well as for more extensive treatments that require surgical therapy.

An exceptionally high regenerative rate of alveolar bone is achieved after TwinLight® treatment of the implant surface and the bony implant site.

The procedure is performed in the following steps:

Step 1: Removal of the soft-granulation tissue with Er:YAG in LP mode

Step 2: Removal of the bacterial biofilm on the implant surfaces with Er:YAG in MSP mode

Step 3: Ablation of infected bone with Er:YAG in QSP mode

Step 4: Bacterial reduction of bone tissue with Nd:YAG in MSP mode

Step 5: Biostimulation with Nd:YAG in VLP mode

**In case of peri-implant mucositis, only step 2 is performed.*

What is the Advantage of using TwinLight®?

TwinLight® is one of the most effective methods of peri-implantitis treatment, successfully meeting the objectives of controlling infection through decontamination of peri-implant tissues and arresting disease progression.

Removal of granulation tissue from the alveolar bone and connective tissue with Er:YAG laser is selective. The bactericidal effect of Er:YAG on the surgical site is highly effective and the implant surface is completely cleaned without chemicals. The subsequent Nd:YAG treatment step promotes faster healing by decontaminating and biostimulating the tissue. Inflammation, swelling, and bleeding of soft-tissue lesions, which may lead to bone loss, can be handled without surgery, and healthy peri-implant tissue assure greater long-term implant success.

Fig. 1: LightWalker peri-implantitis screen

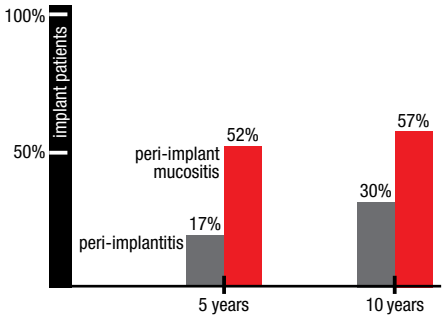

Fig. 2: Incidence of peri-implant mucositis and peri-implantitis [5]

Why is LightWalker Perfect for TwinLight® Peri-implantitis Treatment?

LightWalker combines dentistry's best wavelengths, Er:YAG and Nd:YAG, in one powerful system, allowing practitioners to perform the broadest range of dental procedures. Gentle treatment with LightWalker assures that the highly fragile bone surrounding the implant remains intact. Because the Er:YAG wavelength with LightWalker is used in an optimal mode, there is no danger of thermal damage to the surrounding bone and no significant alterations of the implant surface, as is caused with other lasers[1,2]. There is no mechanical, chemical or any other means of trauma during the entire treatment.

What is the Incidence of Peri-implantitis?

The available data suggest that in one in five patients will develop peri-implantitis at some point, and four in five implant patients will exhibit peri-implant mucositis.[3] It has also been reported that about 40% of implants have peri-implantitis in Sweden, Italy and Switzerland, and that there are approximately 400,000 cases of peri-implantitis in the U.S.[4]

Sources

1 *Stubinger et al. Surface alterations of polished and sandblasted and acid-etched titanium implants after Er:YAG, carbon dioxide, and diode laser irradiation. Int J Oral Maxillofac Implants. 2010 Jan-Feb; 25(1):104-11.*

2 *Kreisler et al. Temperature Changes at the Implant-Bone Interface During Simulated Surface Decontamination with an Er:YAG Laser. Int J Prosthodontics. 2002 Nov/Dec;15(6):582-7.*

3 *Liebaug et al. Er:YAG Laser – The key factor in the therapy of periimplant inflammations. Int Mag of laser dentistry. 2014; 14(3):6-15.*

4 *Yukna, presentation during the WFLD congress in Paris, 2014.*

5 *Meijer et at. Incidence of peri-implant mucositis and peri-implantitis in edentulous patients with an implant-retained mandibular overdenture during a 10-year follow-up period. J Clin Periodontology. 2014 Dec: 41 (12): 1178-83.*

To learn more about TPT and what LightWalker can do for your practice contact Fotona at info@lightwalkerlaser.com today.