Periodontists using the YSGG Waterlase are achieving marked success in all the periodontal indices.

**NEW LITERATURE SUPPORTS THE STRENGTHS OF THE 1.54 µM YSGG WAVELENGTH IN THE TREATMENT OF PERIODONTAL DISEASE.**

Periodontal and clinical success can be published that indicates that E:Cr:YSGG-irradiated tissue undergoes a controlled laser-induced thermal ablation, which results in regeneration of the periodontal ligament, cementum, and bone.

**A pilot study of E:Cr/YSGG laser therapy used as an adjunct to scaling and root planing in patients with early and moderate periodontitis**

**Aims:**
- To compare the E:Cr/YSGG laser therapy used as an adjunct to scaling and root planing (SRP) with SRP alone in reducing plaque, gingival inflammation, probing depth, and attachment loss.

**Methods:**
- 24 subjects with early to moderate periodontitis were assigned to one of two groups: E:Cr/YSGG laser therapy (TURBO) or SRP alone (CTRL). Each group underwent scaling and root planing followed by treatment as follows:
  - TURBO: E:Cr/YSGG laser therapy with water cooling to achieve a depth of 3 mm.
  - CTRL: SRP alone.

**Results:**
- Significant improvements were noted in TURBO when compared to CTRL when examining clinical attachment level.

**Conclusion:**
The use of E:Cr/YSGG laser therapy as an adjunct to scaling and root planing may prove to be advantageous and should be further investigated in future studies.

**References:**
Periodontists using the YSGG Waterlase are achieving marked success in all the periodontal indices.

NEW LITERATURE SUPPORTS THE STRENGTHENING OF THE 1.34-UM YSGG WAVELENGTH IN THE TREATMENT OF PERIODONTAL DISEASE.

Periodontal and oral scores published in April 2012 indicate that E.Cr:YSGG YAG laser invented and commercialized by Business Technology, Inc., stands as a significant improvement in terms of clinical performance, as compared to existing conventional periodontal treatment following augmentation procedures, irrespective of a type of case evaluated, fast healing, and reduced costs. 

In a study of 15 healthy subjects, it was found that E.Cr:YSGG YAG laser allowed the treatment to be accomplished with a 50% shorter treatment time than with standard approaches (Eichler, et al., Biometals, 2008). The same study showed that E.Cr:YSGG YAG laser treatment was associated with significant improvements in bleeding on probing, which was further confirmed in another study by Schepers and van Steenberghe (J. Clin. Laser Med. Surg., 2011).


disclosure: The following summarizes some contributions to the field of Lasers in Periodontal therapy, courtesy of Dr. Robert P. (Rieke) Hanz (University of Iowa, USA)

Dr. Robert P. (Rieke) Hanz, DDS, is a board-certified periodontist and dental implantologist in private practice and an Assistant Professor at the University of Iowa in Iowa City, Iowa. He is a founding member of the American Academy of Laser Dentistry, a Past President of the Iowa Dental Society, and a Fellow of the International College of Laser Dentistry. Dr. Rieke is the past Chairman of the Board of Directors of the American Academy of Periodontology.

Dr. Hanz is an expert in non-surgical and surgical laser protocol treatments for periodontal disease and has published extensively in the laser dentistry literature. His research interests include the role of lasers in periodontal disease, odontogenic infection, temporomandibular joint dysfunction, and head and neck cancer surgery.

For more information, please visit: www.biolase.com

About Biolase.

Biolase is the global dental laser market leader with over 12,000 lasers in use today and the most complete family of dental lasers – from hard to soft tissue – to address the most advanced soft- and hard-tissue applications.

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**New**

**www.biolase.com**

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**Biolase Technology, Inc.**

**About**

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Deep Pocket Therapy is a highly effective, more aesthetic and more comfortable alternative to traditional surgical procedures for my patients.

Deep Pocket Therapy (DPT™) with New Attachments™ using the Waterlase MD laser and patented Radial Tip (Folding Tip™) is a minimally invasive, FDA cleared, therapy for root resorption of advanced gum disease that prevents cavitation, maintains periodontal ligament attachment and prevents root resorption in the root area of healthy gingiva attachment.

The YSGG laser energy of the Waterlase MD is especially effective for minimally invasive removal of both subgingival inflamed tissue and calculus deposits, to prepare the pocket and surface of the tooth for healing and new attachment. The Waterlase MD’s FDA clearance for both of these indications.

The Waterlase MD will enhance your practice. Distinctly you are a specialist at the forefront, by periodontists, is provided with your purchase of the laser.

The Total Periodontal Laser Solution

Unlike most lasers historically used in periodontal therapy, the Waterlase MD Turbo YSGG laser is a unique laser beam technology. It is indicated for use on soft tissue, bone and tooth structures, making it extremely versatile.*

SURGERY

Most periodontal laser users focus on using heat. The Waterlase MD combines YSGG laser energy and a patented spray of water (HydroPhotonics™) to cut soft tissue without heat, with benefits reported such as: fine bleeding and patient post-op sensitivity, for better patient acceptance and greater case acceptance.

In soft tissue mode, the 2,780 nm Er,Cr:YSGG Waterlase MD laser energy vaporizes tissue to yield brisk, exact cuts, providing excellent hemostasis, which in turn provides you with a clearer field of vision during surgery.

IMPLANTS

For implant operators, the Waterlase MD can improve your productivity through a range of valued applications:

- Creating ideal emergence profile
- Bone contouring
- Osteotomy
- Implant recovery

USEFUL CLINICAL LONG-THEMED FOR SAME DAY RETRACTIONS

The minimally invasive nature of the Waterlase MD YSGG laser can help eliminate tissue displacement and flap preparation in crown lengthening, i.e. it assists in performing an extremely beautiful periodontal flap procedure, shaping the free gingival margins, rounding, and recessing excess and extruding bone.*

The Waterlase MD is specifically designed for Waterlase DPT™ and other applications with your patented Radial Firing Perio Tip™ (RFPT) is a minimally invasive, FDA-cleared, therapy designed for Waterlase DPT™ and other applications with your Waterlase MD laser.

Comprehensive Periodontal Waterlase MD™ Training Included

At Biolase, our goal is to help maximize the benefits of laser ownership for you, your patients, and your practice. We include training especially designed for Waterlase DPT™ and other applications with your Waterlase MD laser.

A one-day course in Waterlase MD periodontal applications, conducted by periodontists, is provided with your purchase of the laser.

- Case selection, diagnosis and treatment planning
- Tip-flap technique
- Soft tissue and alveolar bone resection
- Alveolar bone grafting
- Soft tissue ablation
- Osseous resection
- Osteotomy
- Root amputation
- Tissue resection and contouring
- Bone resection

The Total Periodontal Laser Solution

The 2,780 nm Er,Cr:YSGG wavelength of the Waterlase MD is especially effective for eliminating root resorption of advanced gum disease. For enhanced clinical results, unmatched versatility, and technological advancement, this is the most technologically advanced laser system in periodontics.

- Soft-tissue mode for creating a new soft tissue layer without thermal damage
- Hard tissue mode for cutting bone without thermal damage
- Coagulation, 1580 nm for superior coagulation and access to bone
- 980 nm for bone to bone cutting
- 1470 nm for bone to bone cutting and treating furcations
- 2,780 nm for high efficiency and excellent hemostasis
- 2,940 nm for cutting bone without thermal damage
- 3,080 nm for treating furcations
- 3,550 nm for cutting bone without thermal damage

The Total Periodontal Laser Solution

Clinically & Technically Superior by Design

The 2,780 nm Er,Cr:YSGG laser energy of the Waterlase MD YSGG laser is exclusively designed for Waterlase DPT™ and other applications with your Waterlase MD laser.

Impactful results in reduced swelling and patient post-op sensitivity, for a better patient experience and enhanced case acceptance. And by decreasing the amount of laser energy with a portion of straight emission, and better access to the narrow part of the periodontal pocket since the tip has no side edges.

Additionally, we also offer the most comprehensive selection of traditional straight firing tips for periodontal surgery, implant recovery, and crown lengthening, to help you meet all of your patients’ needs.
“Deep Pocket Therapy is a highly effective, more aesthetic and more comfortable alternative to traditional surgical procedures for my patients.”

The Total Periodontal Laser Solution

Unmatched results historically seen in periodontal therapy, the Waterlase MD Turbo YSGG laser is the new standard of care. This is achieved by use of soft tissue, bone and tooth structure, making it extremely versatile.

SURGERY

Most periodontal lasers cut tissue using heat. The Waterlase MD combines YSGG laser energy and a patented spray of water (HydroPhotonics™) to cut soft tissue and bone without heat, with benefits reported as less nerve reactivity and post-op pain, superior visibility, etc. For your patient experience and greater case acceptance.

In soft tissue mode, the Waterlase MD engages the Waterlase MD laser energy to vaporize soft tissue and bone to produce a smooth, precise, and hemostatic surface.

Implants

If you place implants, the Waterlase MD can improve your productivity through a range of related applications:

• Creating ideal emergence profile
• Bone inlay
• Occlusion
• Implant recovery

CLINICALLY & TECHNOLOGICALLY SUPERIOR BY DESIGN

The Waterlase MD Turbo YSGG laser is a two-day course in Waterlase MD periodontal applications, conducted by professionals, is provided with your purchase of the laser.

Step-by-step treatment protocols,
Case selection, diagnosis, and treatment planning,
Open flap periodontal surgery, including flap designs,
Debridement and removal of subgingival calculus deposits, to prepare the pocket lining the tooth for healing and new attachment.
Removal of granulation tissue, gingivectomy, and gingivoplasty (de-epithelialization)
Removal of subgingival inflamed tissue and calculus deposits, to prepare the pocket lining the tooth for healing and new attachment. The Waterlase MD has FDA clearance to build bone without damage.

The Waterlase MD will enhance your practice. Distinguish you as a practitioner at the forefront of new attachment therapy, the Waterlase MD Turbo YSGG laser is the new standard of care.

Comprehensive Periodontal Waterlase MD™ Training Included

At Biolase, our goal is to maximize the benefits of laser treatment for you and your patients. We include training specifically designed for Waterlase MD™ and other applications with your Waterlase MD Turbo laser.

A one-day course in Waterlase MD periodontal applications, conducted by professionals, is provided with your purchase of the laser.

Case selection, diagnosis, and treatment planning,
Open flap periodontal surgery, including flap designs,
Debridement and removal of subgingival calculus deposits, to prepare the pocket lining the tooth for healing and new attachment.
Removal of granulation tissue, gingivectomy, and gingivoplasty (de-epithelialization)
Removal of subgingival inflamed tissue and calculus deposits, to prepare the pocket lining the tooth for healing and new attachment.

The multi-talented Waterlase MD Turbo laser.

Dentistry’s advanced laser system in periodontics:

• Soft-tissue mode for creating ideal soft-tissue contours
• Hard-tissue mode for creating ideal bone without thermal damage
• Detachable contra-angle 360° handpiece for superior comfort and access to all areas of the mouth
• FDA 510(k) clearing for accurate nanometric surgical procedures and the MD Turbo Compatible for increased mobility when suturing hard and soft tissue

The Waterlase MD Turbo YSGG laser is an ideal instrument for all soft tissue treatments, from creating ideal emergence profile to healing and new attachment. The Waterlase MD Turbo YSGG laser is designed for Waterlase DPT™ and other applications with your Waterlase MD Turbo laser.

The Waterlase MD Turbo YSGG laser enables you to select the precise cutting speed needed to perform every procedure with unmatched comfort, healing, and digital visibility. The Waterlase MD Turbo YSGG laser enables you to perform every procedure with unmatched comfort, healing, and digital visibility.

The Waterlase MD Turbo YSGG laser is an ideal instrument for all soft tissue treatments, from creating ideal emergence profile to healing and new attachment. The Waterlase MD Turbo YSGG laser is designed for Waterlase DPT™ and other applications with your Waterlase MD Turbo laser.

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Periodontists using the YSSG Waterlase are achieving marked success in all the periodontal indices.

**NEW LITERATURE SUPPORTS THE STRENGTHS OF THE 2.14 MW YSGG WAVELENGTH IN THE TREATMENT OF PERIODONTAL DISEASE.**

Field and oral science has published a number of studies that demonstrate YSGG (yttrium, chromium: yttrium-scandium-gallium-garnet) lasers are achieving marked success in all the periodontal indices.

**Pu**

Periodontists using the ysgg Waterlase when compared to SRP alone, due to more efficient delivery of the laser, particularly in the management of deep pockets, have reported more significant improvements in bleeding on probing, periosteal elevation, radiographic hard tissue loss, and clinical attachment gain.

**YSGG lasers are achieving marked success in all the periodontal indices.**

**Pu**

"Bret Dyer, DDS, MS, Private Periodontal Practice, Sugar Land, TX"

**CASE 1**

"Example of Minimally Invasive Deep Pocket Therapy utilizing the Waterlase MD"

**Pre-O**


**Pre-O**


**Pre-O**


**Pre-O**


**Pre-O**


**Pre-O**


**Pre-O**


**Pre-O**

"New Bone" Periodontal Ligament Cementum

**Pre-O**

"Kislich DS, Procurement of autogenous bone from the mandibular ramus with simultaneous third-molar extraction. Pediatr Dent 2009;31:8-13."