REPAIR™

Effectively manage your periodontal patients with patient-preferred, minimally invasive therapy.

BIOLASE

REPAIR™

A Minimally Invasive Protocol for
Optimal Periodontal Patient Management

REPAIR Perio™ was developed to provide clinicians a scientifically advanced treatment option for managing periodontally compromised patients. Utilizing the Waterlase and patented Radial Firing Perio Tip™ (RFPT), REPAIR Perio provides a safe, effective laser treatment protocol that patients accept.

- Minimally invasive protocol
- Treat site specific or full mouth cases for greater flexibility in treatment planning
- Supported by clinical evidence and scientific research
- Versatile YSGG laser ideal for comprehensive clinical use
- Cleared for gentle removal of subgingival calculus
- Promotes cementum-mediated periodontal ligament new-attachment to the root surface in the absence of long junctional epithelium

REPAIR™

WATERLASE® ER,CR:YSGG PERIODONTITIS REGIMEN

REPAIR Perio is the first definitive step-by-step protocol for using an Er,Cr:YSGG laser to assist in the management of early, moderate and severe chronic periodontitis. It consists of three phases: pre-surgical, surgical and post-surgical.

PHASE I: PRE-SURGICAL PHASE

All patients should have a comprehensive periodontal examination/evaluation including data collection of periodontal charting and radiographs, medical and dental history and risk assessment.

Phase I treatment is implemented for removal of supra- and subgingival biofilm and calculus through scaling and root planing (S/RP) and the initiation and evaluation of oral hygiene compliance. Occlusal assessment and treatment may be warranted in this phase. Splinting of teeth may be an option.

PHASE II: SURGICAL PHASE

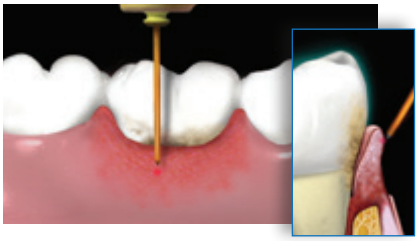
Phase II surgical treatment plan is developed based on the re-evaluation of periodontal inflammation and oral hygiene compliance. The surgical plan can be for a single tooth or multiple teeth sites, a quadrant or half-mouth depending on number of indicated sites. If desired, the half-mouth protocol is generally UR/LR followed by at least 2-3 weeks of post-operative management before treating the UL/LL areas.

Waterlase
Pre-set Settings

1

OUTER POCKET DE-EPITHELIALIZATION

Outer pocket gingival epithelium is removed from the free gingival margin down to a width at least equal to the pocket depth.



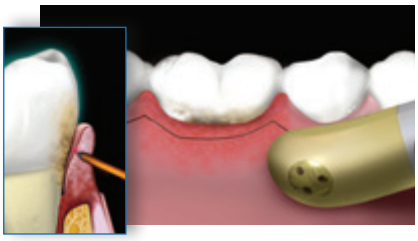
Tip: RFTP5
Power: 1.5W
Air/Water: 40%/50%
Pulse rate: 30 Hz
H mode

2

GINGIVECTOMY (AS NEEDED)

A gingivectomy should only be performed if pseudo-pocketing is present.

Ensure you do not compromise adequate attached gingiva.



Tip: RFTP5
Power: 1.5W
Air/Water: 40%/50%
Pulse rate: 30 Hz
H mode

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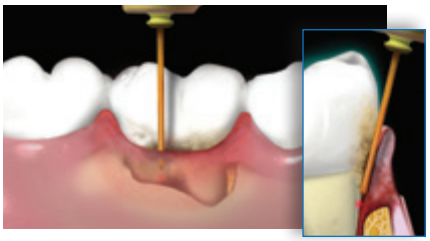
REPAIR™ WATERLASE PERIO REGIMEN CONTINUED

3 DE-EPITHELIALIZATION AND RETRACTION

The pocket epithelium should be removed and should be completed apically, down to bone. The gingival margin can be retracted as a mini flap for access.



Tip: RFPT5
Power: 1.5W
Air/Water: 40%/50%
Pulse rate: 30 Hz
H Mode

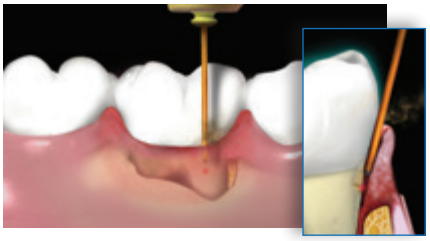
4 SCALING AND ROOT PLANING

Conventional treatment with ultrasonics and hand instruments to remove root surface accretions and/or calculus and to smooth cementum.

Laser not used

5 SULCULAR DEBRIDEMENT / DEGRANULATION

Remove smear layer created by scaling, along with any residual calculus, and prepare the root surface for reattachment. Remove pocket lining and degranulate to expose bone surface.



Tip: RFPT5
Power: 1.5W
Air/Water: 40% / 50%
Pulse rate: 30 Hz
H mode

Waterlase
Increase pulse rate to **75 Hz** for faster calculus removal.

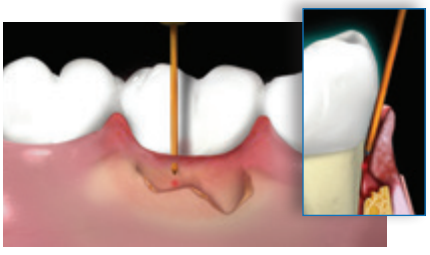
6 BONE DECORTICATION

Recontour osseous defects. Hold tip parallel to root surface and gently tap all the way down to and into bone, retracting slightly and repeating all the way around tooth. If necessary, change angle of the laser tip and treat into the walls of infrabony defects.

Tip: MZ6
Power: 2.5W
Air/Water: 70% / 80%
Pulse rate: 30 Hz
H mode

7 FINAL SULCULAR DEBRIDEMENT

Remove residual debris and induce blood coagulation.



Tip: RFPT5
Power: 1.5W
Air/Water: 10% / 10%
Pulse rate: 30 Hz
H mode

8 COMPRESS WITH 2X2 GAUZE

Compress surgical site with wet 2x2 gauze for 3-5 minutes.

PHASE III: POST-SURGICAL PHASE

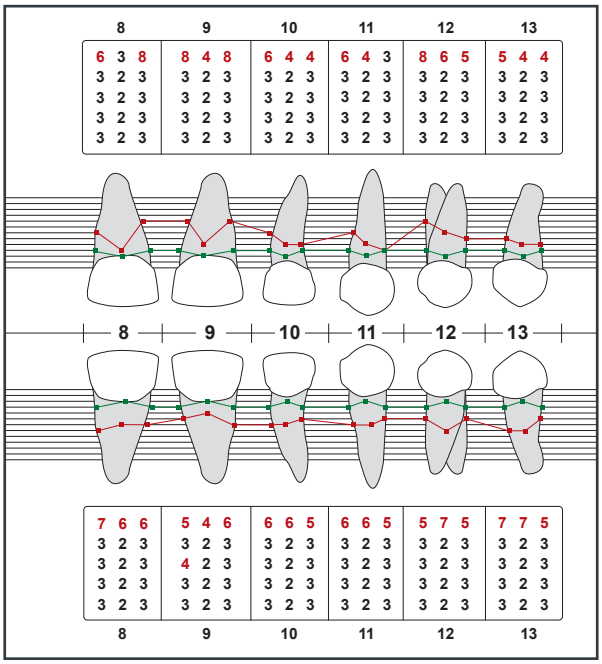
- IMMEDIATE POST-OPERATIVE: Brush teeth lightly with soft brush and use mouth rinse to supplement brushing if discomfort exists.
- ONE WEEK AFTER LASER TREATMENT: Gently clean between teeth using an interproximal brush dipped in mouthwash.
- NO PROBING for at least 3 months, at which time a supragingival scaling is completed.

"Waterlase REPAIR is a highly effective, more aesthetic and more comfortable alternative to traditional surgical procedures for my patients."

— **Dr. Bret Dyer**
Sugarland, TX

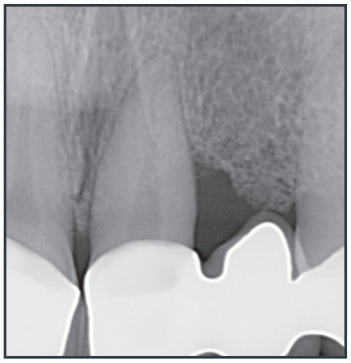
CASE 1

Courtesy of Dr. Bret Dyer



CASE 2

Courtesy of Dr. Todd Jorgenson

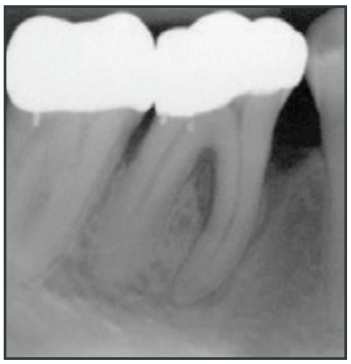


BEFORE

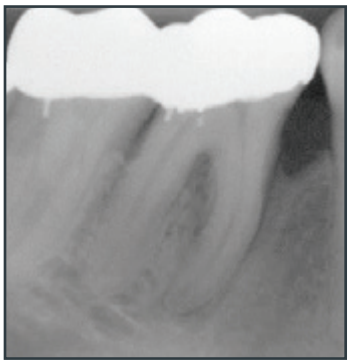
12 MONTHS POST

CASE 3

Courtesy of Dr. Rana Al-Falaki



BEFORE



6 MONTHS POST

Clinical Evidence

M Gupta, AK Lamba, M Verma, et al. "Comparison of periodontal open flap debridement versus closed debridement with Er,Cr:YSGG laser." Australian Dental Journal 2013; 58: 41-49 doi: 10.1111/adj.12021

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Hakki, Sema S et al. 2010. "Comparison of Er,Cr:YSGG laser and hand instrumentation on the attachment of periodontal ligament fibroblasts to periodontally diseased root surfaces: an in vitro study." Journal of periodontology 81(8): 1216-25. http://www.ncbi.nlm.nih.gov/pubmed/20476883

Kelbauskiene, Solveiga et al. 2011. "One-year clinical results of Er,Cr:YSGG laser application in addition to scaling and root planing in patients with early to moderate periodontitis." Lasers in medical science 26(4): 445-52. http://www.ncbi.nlm.nih.gov/pubmed/20549280

Kelbauskiene, Solveiga, and Vita Maciulskiene. 2007. "A pilot study of Er,Cr:YSGG laser therapy used as an adjunct to scaling and root planing in patients with early and moderate periodontitis." Stomatologija / issued by public institution "Odontologijos studija" ... [et al.] 9(1): 21-6. http://www.ncbi.nlm.nih.gov/pubmed/17449974.

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Arnabat-Domínguez, Josep et al. 2010. "Advantages and esthetic results of erbium, chromium:yttrium-scandium-gallium-garnet laser application in second-stage implant surgery in patients with insufficient gingival attachment: a report of three cases." Lasers in medical science 25(3): 459-64. http://www.ncbi.nlm.nih.gov/pubmed/19756837

Walsh, Laurence. 2010. "Maximising gingival aesthetics using lasers." Australasian Dental Practice (August): 48-51.

René Franzen, Marcella Esteves-Oliveira, Jörg Meister, Anja Wallerang, Leon Vanweersch, Friedrich Lampert and Norbert Gutknecht "Decontamination of deep dentin by means of erbium, chromium:yttrium-scandium-gallium-garnet laser irradiation" Lasers in Medical Science Volume 24, Number 1, 75-80, DOI: 10.1007/s10103-007-0522-2

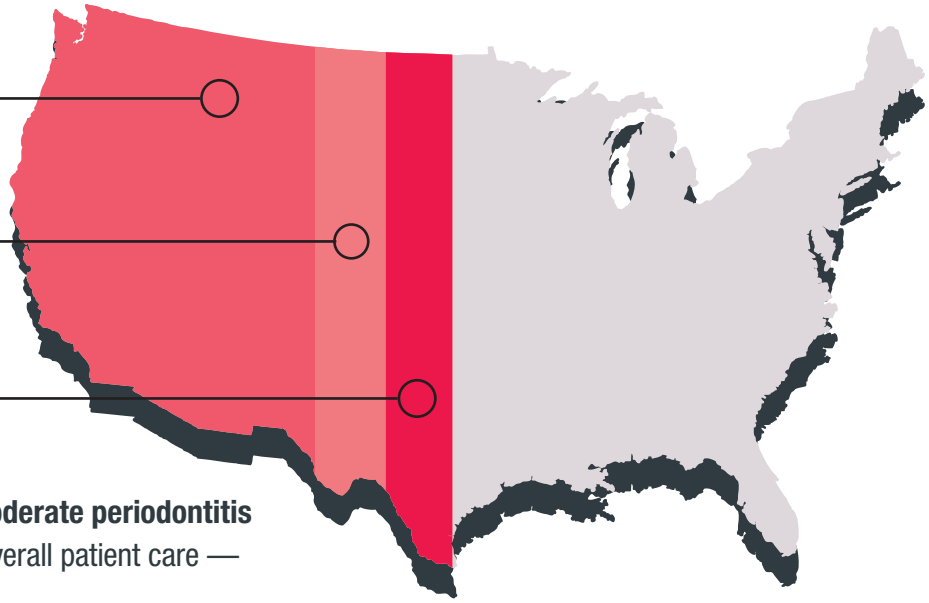
Scan the QR code for links to clinical articles

Almost Half of Adults Have Periodontal Disease[1]

30%
MODERATE
PERIODONTITIS

9%
MILD
PERIODONTITIS

9%
SEVERE
PERIODONTITIS



Finding new ways to better manage the **moderate periodontitis** patients you see today can lead to better overall patient care — and a more sustainable practice.

A Better Way to Manage Moderate Periodontitis

- NEW Waterlase Express gives you the ability to perform the minimally invasive REPAIR Perio™ procedure.
- REPAIR Perio is an easy to learn, minimally invasive, flapless procedure that provides better results with minimal recession and faster healing than traditional methods.
- Generate immediate, positive monthly cash flows by performing just one or two procedures a month with the patients you see today.

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1 Centers for Disease Control and Prevention