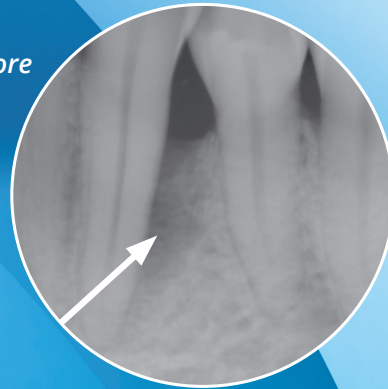


Before



Effectively Manage
Periodontitis with

 **REPAIR**™



12 Months After



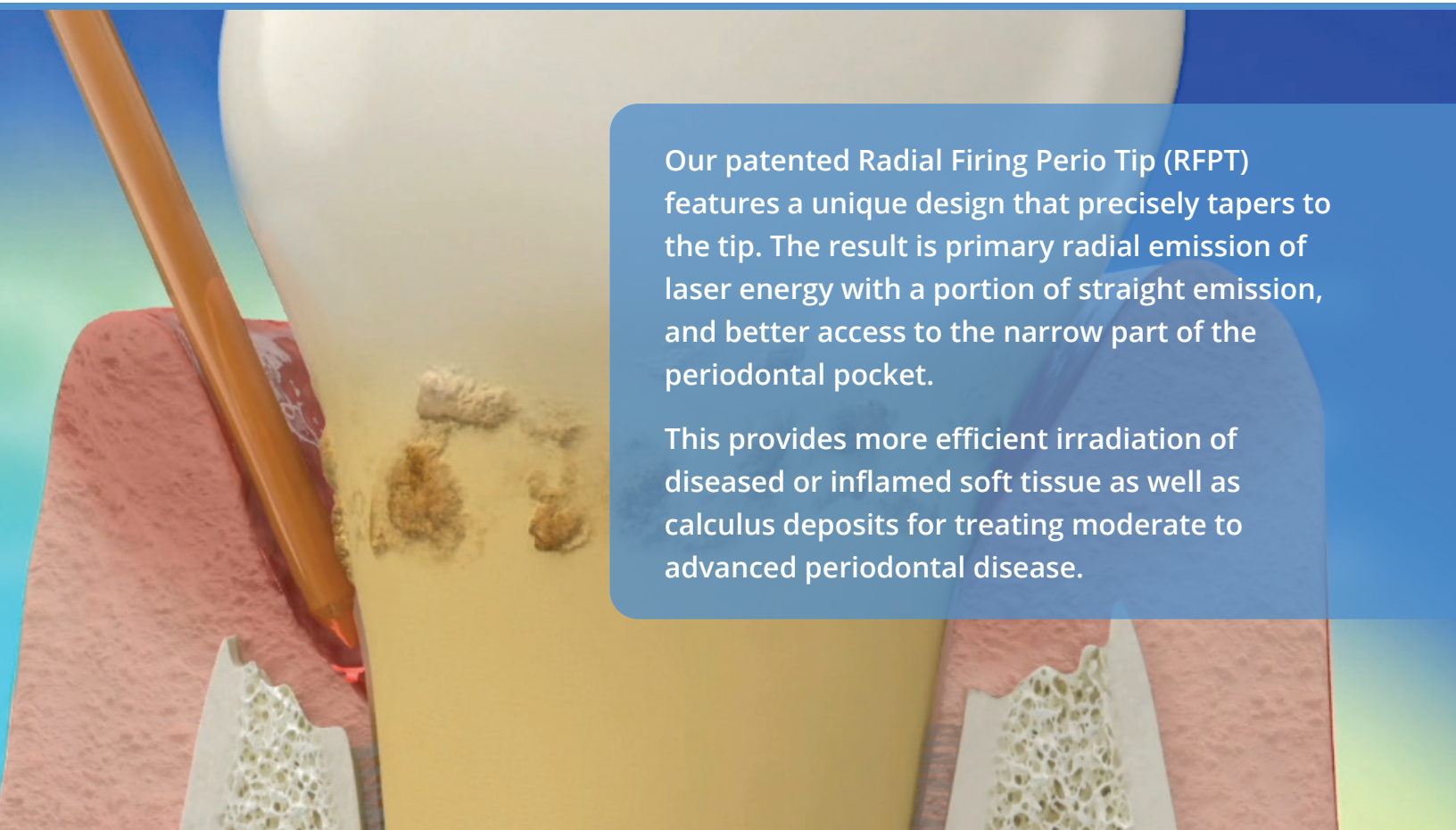
REPAIR™

A Minimally Invasive Protocol for Effective Management of Periodontitis

Periodontal disease is a common, chronic, and persistent infection, affecting almost half of the adults in the United States. The minimally invasive Waterlase REPAIR Perio™ protocol is able to modify the habitat for periodontal pathogens, and is FDA cleared for new cementum mediated periodontal ligament attachment. Waterlase's patented YSGG wavelength's effect on dentin removes the smear layer and opens up the dentinal tubules, which is very beneficial for new attachment. YSGG is the most versatile laser for periodontal applications, as it has positive benefits for both soft tissue and hard tissue. This versatility allows Waterlase REPAIR Perio to achieve **superior patient reported outcomes** (less swelling, bruising, and bleeding) and faster procedure times — with **equivalent clinical results** to the latest open flap techniques. Results are supported by a **landmark, first-of-its-kind**, blind study designed by The McGuire Institute™ to meet stringent AAP Best Evidence Consensus recommendations.¹



Samuel B. Low, DDS,
MS, MEd



Our patented Radial Firing Perio Tip (RFPT) features a unique design that precisely tapers to the tip. The result is primary radial emission of laser energy with a portion of straight emission, and better access to the narrow part of the periodontal pocket.

This provides more efficient irradiation of diseased or inflamed soft tissue as well as calculus deposits for treating moderate to advanced periodontal disease.

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 sub-gingival 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

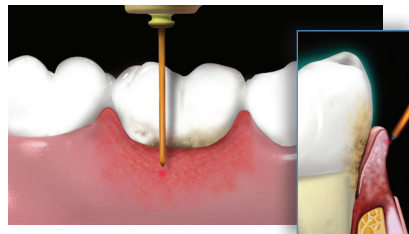
Phase II surgical treatment plan is developed based on the re-evaluation of periodontal inflammation and oral hygiene compliance. The surgical plan can be for a single tooth or multiple teeth sites, a quadrant or half-mouth depending on number of indicated sites. If desired, the half-mouth protocol is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

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.



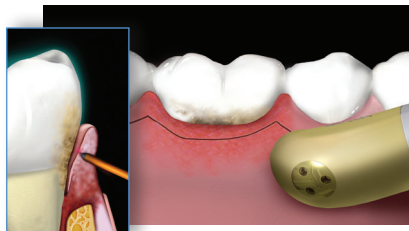
Tip: RFTP5
Power: 1.5W
Air/Water: 40%/50%
Pulse rate: 30 Hz
H mode

2

GINGIVECTOMY (AS NEEDED)

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

Ensure you do not compromise adequate attached gingiva.

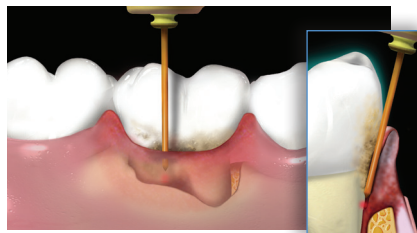


Tip: RFTP5
Power: 1.5W
Air/Water: 40%/50%
Pulse rate: 30 Hz
H mode

3

DE-EPITHELIALIZATION AND RETRACTION

The pocket epithelium and associated granulation tissue should be removed and completed apically, down to bone. The gingival margin is to be reflected as a mini-flap for adequate root and bone access.



Tip: RFPT5 or RFPT8
Power: 1.5W
Air/Water: 40%/50%
Pulse rate: 30 Hz
H Mode

REPAIR™ WATERLASE PERIO REGIMEN CONTINUED

4

SCALING AND ROOT PLANING

Conventional treatment with ultrasonics and possible hand instruments to remove root surface accretions and/or calculus. Air medicinal delivery with erythritol is an additional option.

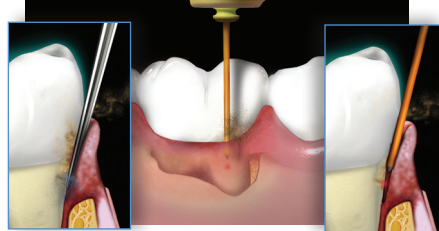


Laser not used

5

SULCULAR DEBRIDEMENT / DEGRANULATION

Remove smear layer created by S/RP, along with any residual calculus, to prepare the root surface for reattachment. Remove any granulation tissue to expose bone surface.



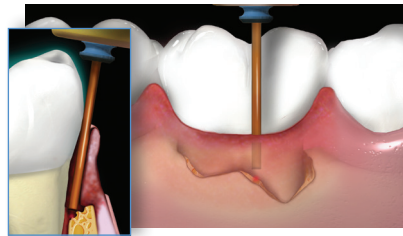
Tip: RFPT5
Power: 1.5W
Air/Water: 40% / 50%
Pulse rate: 30 Hz
H mode

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. Optional addition of osseous augmentation and/or biologics based on bony topography

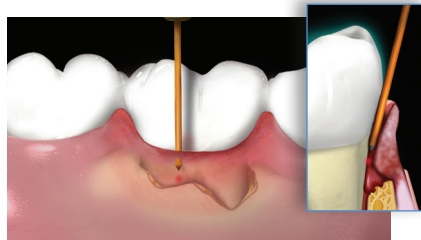


Tip: MZ6
Power: 2.5W
Air/Water: 70% / 80%
Pulse rate: 30 Hz
H mode

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. Optional addition of Cyanoacrylate or suture for closure.

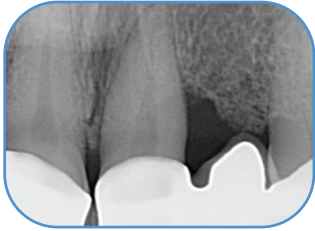


PHASE III: POST-SURGICAL PHASE

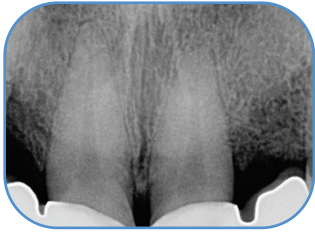
- IMMEDIATE POST-OPERATIVE: Brush teeth lightly with soft brush and use anti-microbial mouth rinse to supplement brushing if discomfort exists.
- ONE WEEK AFTER LASER TREATMENT: Gently clean between teeth using an interproximal brush dipped in mouth rinse.
- NO PROBING for at least 3 months, at which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

REAL RESULTS

CASE 1 – Courtesy of Dr. Todd Jorgenson

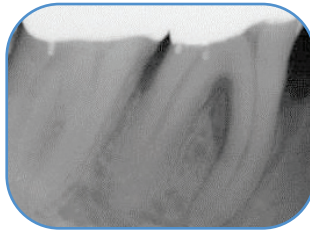


BEFORE

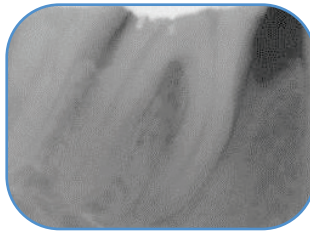


12 MONTHS AFTER

CASE 2 – Courtesy of Dr. Rana Al Falaki

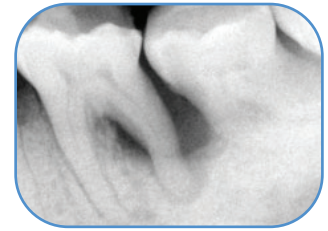


BEFORE

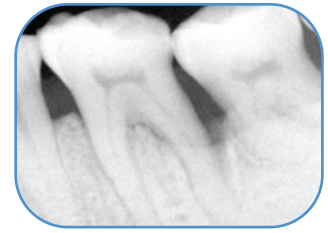


6 MONTHS AFTER

CASE 3 – Courtesy of Dr. Bret Dyer



BEFORE



36 MONTHS AFTER

BACKED BY LANDMARK SCIENTIFIC RESEARCH

Data from a first-of-its-kind study published in the Journal of Periodontology and conducted at The McGuire Institute™, demonstrates the value of Waterlase technology in managing periodontitis. This study was the first controlled, multi-centered, blinded study on lasers in managing moderate to severe periodontitis. 54 patients were enrolled at five different nationwide sites, with six experienced periodontists. It is also the only laser study in managing periodontitis designed to meet the stringent American Association of Periodontology's Best Evidence Consensus recommendations. The study compared REPAIR®Perio protocol to the traditional Minimally Invasive Surgical Technique (MIST) treatment of moderate to severe generalized periodontitis.

The REPAIR Perio procedure proved to be equally as effective as MIST for PD reduction and CAL gain. However, the patient reported outcomes from the laser group versus MIST demonstrated statistically significant differences, with the laser group reporting less bleeding, less swelling, less bruising, and less use of extra oral ice packs following treatment. The study also found that the REPAIR Perio protocol resulted in 20% shorter procedure times than MIST procedures.

This landmark study demonstrated that REPAIR is as effective as MIST procedures in clinical parameters, such as pocket depth and attachment level, but includes the benefit of significantly better patient-reported outcomes.

CLINICAL EVIDENCE

Supporting clinical resources are available at biolase.com/Clinical-Articles



WORLD-CLASS EDUCATION



TRAINING:

- ✦ Beginning your laser journey? Seminars teach a broad overview of laser benefits
- ✦ Choose Waterlase Foundations or our Advanced Series- 5 highly focused specialist courses
- ✦ Want a one-on-one mentorship? On-Demand in-person training with content tailored to your practice.

FREE RESOURCES:

- ✦ Live, free CE webinars monthly featuring the best in laser dentistry
- ✦ Library with 100+ hours of free on-demand webinars
- ✦ Join thousands of clinicians to connect and share knowledge in the Waterlase Dentist Facebook group
- ✦ Clinical animation guides, protocol guides, clinical gallery

Visit [Education.biolase.com](https://www.education.biolase.com) for more information.

INNOVATIVE TECHNOLOGY

- ✓ 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 sub-gingival calculus
- ✓ Promotes cementum-mediated periodontal ligament new-attachment to the root surface in the absence of long junctional epithelium



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LEADER IN DENTAL LASERS™

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