

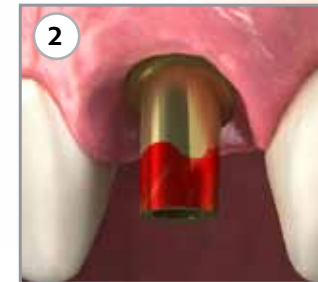


## restoring BioHorizons implants with Laser-Lok esthetic abutments

Laser-Lok esthetic abutments are used to create natural looking, cement-retained, single- or multiple-unit prostheses in the esthetic zone. The abutment margins are enhanced with the patented Laser-Lok surface technology which has been shown to establish a biologic seal of connective tissue fibers<sup>1</sup> that protects and maintains the crestal bone and reduces pocket depth.<sup>2,3</sup> The following technique describes a one abutment, one time approach which is ideal for establishing and maintaining the biologic seal.



1 Place the esthetic abutment at the time of surgery (one stage)<sup>4</sup> or at implant uncoverly (two-stage) shown here.<sup>5</sup>



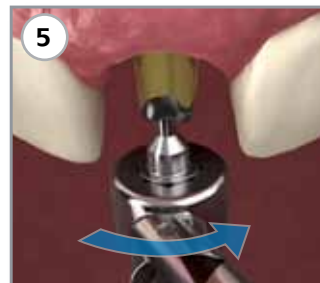
2 Mark the areas which require modifications, height, margins, etc.



3 Remove the abutment and place on a prepping handle using the abutment screw and an .050" hex driver. Prep as needed using a carbide/ coarse diamond bur of choice.



4 Place the prepped abutment in the mouth and check contours. Refine as needed. *NOTE: Remove prepping particulate using an ultrasonic cleaner for ≥2 minutes and sterilize prior to placement.*



5 Torque the abutment screw to 30 Ncm. Place a cotton pellet in the screw access hole and fill with composite.



6 Try-in an appropriate poly-carbonate/shell crown and modify as needed using conventional crown and bridge techniques.<sup>6</sup>



7 Apply separator to the esthetic abutment, place acrylic inside the shell crown. Properly position over the abutment and perform a reline.



8 Finish excess acrylic and polish. Adjust bite so it is out of occlusion and secure using temporary cement of choice.<sup>7</sup>

1. Radiographic Analysis of Crestal Bone Levels around Laser-Lok<sup>®</sup> Collar Dental Implants. C Shapoff, B Lahey, P Wasserlauf, D Kim. Int J Periodontics Restorative Dent 2010;30:129-137.

2. Clinical Evaluation of Laser Microtexturing for Soft Tissue and Bone Attachment to Dental Implants. GE Pecora, R Ceccarelli, M Bonelli, H Alexander, JL Ricci. Best Clinical Innovations Presentation Award. Academy of Osseointegration 2004 Annual Meeting. Implant Dentistry. Volume 18(1). February 2009. pp. 57-66.

3. Histologic Evidence of a Connective Tissue Attachment to Laser Microgrooved Abutments: A Canine Study. M Nevins, DM Kim, SH Jun, K Guze, P Schubach, ML Nevins. Int J Periodontics Restorative Dent. Volume 30, 2010. p. 245-255.

4. Adequate primary stability required.

5. The creation of a wound encourages healing and attachment to the Laser-Lok zone.

6. An alternative approach is to take a digital impression (Cerec or similar) to design and fabricate a crown.

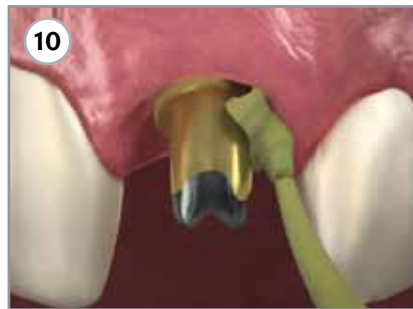
7. When performing cementation procedures, apply a minimal amount of cement to the inside margin surface of the restoration. Do not fill the restoration with cement.



## first restorative visit



Remove the temporary crown. Check for any gingival recession and modify abutment intraorally as needed.



Take a conventional crown and bridge impression using retraction cord if needed.<sup>6</sup>



Replace the temporary crown.<sup>7</sup> Send case with everything required to the lab for fabrication of the final prosthesis.

## final restorative visit



Remove the temporary crown. Cement the final restoration using conventional procedures.<sup>7</sup>



### Laser-Lok Straight Esthetic Abutments

- TP3SEAL** 3.0mm Straight Esthetic Abutment (Wide Emergence)
- PYSEAL** 3.5mm Straight Esthetic Abutment (Wide Emergence)
- PGSEAL** 4.5mm Straight Esthetic Abutment (Wide Emergence)
- PBSEAL** 5.7mm Straight Esthetic Abutment (Regular Emergence)



### Laser-Lok 15° Angled Esthetic Abutments

- TP3AEAL** 3.0mm Angled Esthetic Abutment (Wide Emergence)
- PYAEAL** 3.5mm Angled Esthetic Abutment (Wide Emergence)
- PGAEAL** 4.5mm Angled Esthetic Abutment (Wide Emergence)
- PBAEAL** 5.7mm Angled Esthetic Abutment (Regular Emergence)



### Laser-Lok Straight Esthetic Abutments (3mm Buccal)

- TP3SEA3L** 3.0mm Straight Esthetic Abutment 3mm buccal (Wide Emergence)
- PYSEA3L** 3.5mm Straight Esthetic Abutment 3mm buccal (Wide Emergence)
- PGSEA3L** 4.5mm Straight Esthetic Abutment 3mm buccal (Wide Emergence)
- PBSEA3L** 5.7mm Straight Esthetic Abutment 3mm buccal (Regular Emergence)

**BIOHORIZONS<sup>®</sup>**  
SCIENCE • INNOVATION • SERVICE

