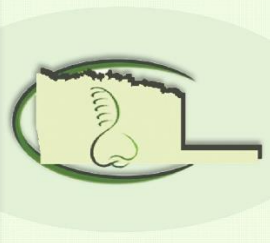




Both of our office locations offer CT scanning for your diagnostic needs.
 South OKC Office: i-CAT Flex - \$155
 Edmond Office: Sirona XG 3D - \$150
 Images are sent to your office on CD or thumbdrive with accompanying viewing software. Printed images are available on request, as well as third-party uploads.

Periodontal Implant Center Advanced Dental Imaging

Implant Planning
 TMJ Evaluation
 Impactions
 Endo Diagnosis
 Ortho Planning



ENHANCING THE WAY YOU SEE PATIENTS.

Periodontal Implant Center
 8203 S. Walker
 Oklahoma City, OK 73139





Periodontal Therapy - Keeping Our Focus

It is easy to get distracted in the present world of dentistry by marketing ploys touting gadgets that look too good to be true and corporate-funded research with biased results that can cause dentists and hygienists to lose their focus on sound periodontal treatment philosophies. We now have at our disposal an array of adjunctive treatments for periodontitis including lasers, special trays to force antibiotics / medicines into the gingival crevice, systemic antibiotics that target periodontal pathogens, antibiotic powders that can be placed into inflamed pockets, pills (Periostat) that can decrease the release of enzymes (collagenase) that break down structures of the periodontium, the ability to test patients for genetic variations that increase the risk of periodontal attachment loss (tests for IL-1beta), and tests for saliva and gingival crevicular fluid that can quantify the presence of certain bacteria or inflammatory cytokines. Even the American Academy of Periodontology, with sincere intent, has muddied the water with regards to diagnosing periodontitis via the new "Staging" and "Grading" criteria. It seems that treating periodontitis is becoming more complex with time. So where do we now stand? What is the best cocktail of treatments that will serve as a surefire cure for every case of periodontitis? Reality - there isn't one.

What do we know? There is a mountain of well-conducted, peer-reviewed research from the 1950's - 70's that remains the basis for treating periodontitis. At the core of this research lies a few fundamental tenants:

- 1) Host-inflammatory responses to bacterial stimuli account for the majority of periodontal attachment loss.
- 2) The best way to remove bacteria from subgingival spaces / periodontal pockets is with mechanical therapy (via curettes or ultrasonic instruments).
- 3) Patient compliance with daily plaque control efforts and regular supportive visits to disrupt the organization of subgingival biofilms is critical for the maintenance of attachment levels long term (*no matter what adjunctive therapies are utilized*).
- 4) Poor plaque control, smoking and uncontrolled diabetes remain the top three modifiable risk factors for periodontitis.
- 5) Without sound mechanical initial therapy, proper daily plaque control and regular maintenance, any other adjunctive therapies (trays, antibiotics, lasers, Periostat, genetic testing) will have minimal benefit.
- 6) Even with ideal patient efforts and sound clinical treatments including periodontal surgery, approximately 7-9% of patients with periodontitis will continue to lose attachment over time. (*likely due to genetic variations resulting in faulty inflammatory processes*).

In short, our primary focus for patients with periodontal disease should remain centered on improving daily plaque control, improving commitment to regular maintenance visits, smoking cessation and diabetic control. Only then, can we start to look toward any adjunctive therapies to help improve our treatment outcomes.

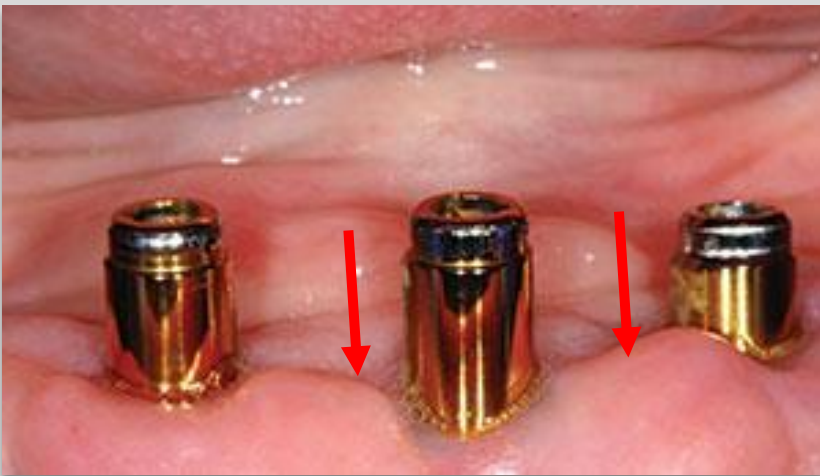
Realistic Benefits of Adjunctive Treatments for Periodontitis (always accompanying mechanical root planing):

- Systemic antibiotics: Decrease in number / type of subgingival bacteria for 60-90 days
- Local antibiotics (Arestin): Decrease in number / type of subgingival bacteria for 60-90 days. Compared to root planing alone in 5-6mm pockets, the average extra gain in attachment is 0.3mm for Arestin + root planing (*this benefit disappears after 120 days*).
- Trays that force antibiotics into the gingival crevice: These devices still do not have FDA clearance for marketing as treatments for periodontitis and they lack quality research that shows any benefit compared to traditional therapies. The American Academy of Periodontology does not endorse the use of these devices.
- Lasers: Compared to root planing alone, benefits in attachment levels with laser therapy + root planing are not statistically significant after 6-12 months (*it all comes back to daily plaque control and regular supportive maintenance*).
- Periostat (20mg doxycycline): Compared to root planing alone, this collagenase inhibitor yields an additional benefit in attachment levels of 0.3mm **Contrary to popular belief, Periostat does not always result in decreased gingival bleeding.*

Locator Abutments - Tips and Reminders

Locator abutments remain the most common form of attachments for full-arch prosthetics - especially in the mandible (CDT code 6053 for Locator overdenture). Made by Zest Anchors, Locator abutments are available for nearly all major implant brands on the market. A few important reminders and tips:

- 1) Locator abutments are made to retain a denture - not support it. The intaglio surface of the denture should rest soundly on the edentulous ridge in all areas. This is most important for patients that have had recent extractions and transitioned to an overdenture. As the ridge remodels / shrinks, the denture becomes supported by the Locator abutments (not good). It is recommended to include at least two hard relines of the denture for patients that are transitioning to a Locator overdenture - one at 4-6 months post-extractions and one at 14-16 months. Without these relines, the implants can become overloaded with occlusal forces, experience increased wear of the retentive inserts and the denture can rock (anterior-to-posterior) as the posterior ridge remodels / shrinks.
- 2) Locator abutments can wear and lead to decreased denture retention (*see photo*). Best to inform patients at the time of initial treatment planning that the abutments themselves usually require replacement every 3-4 years. Make sure to record the collar height of each abutment at the time of initial placement in your progress notes, so replacements can be easily re-ordered in the future as-needed. Code 6056 should be utilized
- 3) Locator attachments in the maxillary arch have been shown to have high incidence of complications (bone loss and peri-implantitis). Locator attachments are a non-rigid connection - the plastic connectors allow micro-movement of the implants with the denture in place. Implants are almost always placed with some angulation in the maxillary arch (due to apical undercut / ridge proclination) and the bone is softer in the maxilla than in the mandible. Taken together (angulation, softer bone, micro-movements), these variables increase the risk of peri-implant issues. Some research indicates complication rates with Locators in the maxillary arch as high as 50%, with 25% completely failing within 5 years. Due to these high rates of complications, other attachment options that have rigid fixation (Hybrid prosthesis or Conus overdenture) are almost always preferred over Locator attachments for the maxillary arch.



As hard and soft tissues remodel following extractions / implant placement, space is created between the underside of the denture and the soft tissues and the denture becomes solely supported by the Locator abutments. As noted above, this can lead to excessive forces into the implants, increased component wear, decreased retention and rocking / instability of the denture. Hard relines are needed to keep the denture in contact with the ridge to prevent such issues.

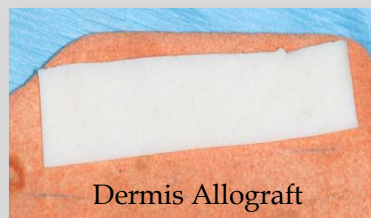


Side-by-side comparisons of a new Locator abutment (left) and old / worn abutment (right). Once the gold anodization is worn off and the rolled edge of the abutment turns silver, retention of the abutments are greatly reduced and replacement should be considered.

Root Coverage Grafting

The 'Slot Technique' for Root Coverage Grafting

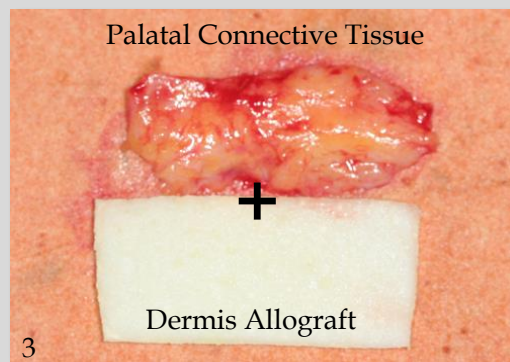
Our newest technique for root coverage grafting involves a conservative mucosal slot entrance to allow access for graft placement. No papilla are reflected, the entire procedure is completed through the small entry point(s). Root surfaces are prepared by removal of existing composite restorations, root planing and tetracycline application. In areas where the remaining attached gingiva is less than 1mm, a second layer of graft material is utilized, often from a palatal donor source (*see case below*).



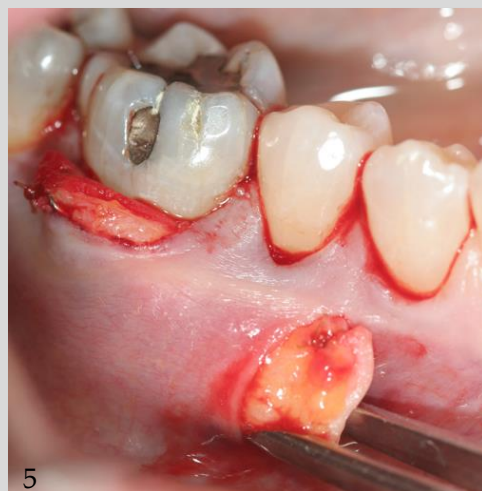
'Bilaminar Technique' with Layered Grafts for Root Coverage



1
Baseline Defect - 4mm recession and less than 1mm attached gingiva



4
Grafts layered, connective tissue on top of allograft due to extreme thinness of remaining gingiva



8203 S. Walker, OKC 73139 ♦ 405-636-1411 ♦ fax: 405-636-1197 ♦ www.okperio.com ♦ email: okperio@yahoo.com

609 S. Kelly, Suite A-1, Edmond 73003 ♦ 405-509-8932 ♦ fax: 405-531-0808 ♦ www.okperio.com ♦ email: northokperio@yahoo.com

