

AADC Positions Committee*
Parameters of Soft Tissue Grafting
Position Statement
June 4, 2009

Introduction

Gingival recession, as defined by the American Academy of Periodontology (AAP), is the location of the gingival margin apical to the cemento-enamel junction. There may be several causes for recession that include mechanical factors (trauma, tooth brush abrasion), inflammatory factors (poor oral hygiene, periodontal disease, restorative considerations), anatomical factors (minimal vestibular depth, frenum involvement, thin periodontium, root prominence and tooth position), and/or heredity factors. The effects of these factors have been shown to contribute to sensitivity, cervical abrasion, root caries and compromised esthetics.

Soft tissue grafting procedures consisting of free gingival grafts (autogenous and allografts), connective tissue grafts, lateral sliding pedicle grafts, double papillae grafts, and coronally positioned flaps, have gained an increased acceptance in the management of gingival recession. These procedures may be delivered individually, in combination with other each other, and with membrane therapy.

Dental benefit plans have reported an increase in the utilization of these procedures. Increased emphasis on cosmetics has driven many patients to seek and many dental practitioners to promote cosmetic procedures. However, because the majority of dental contracts limit and/or exclude those procedures performed solely for cosmetic reasons, payments for soft tissue grafts that are cosmetic in nature rather than therapeutic may adversely affect coverage for services that are truly dentally necessary. Since soft tissue grafts are invasive and expensive, increased utilization of these procedures may result in a significant increase in the cost of care for dental plans.

Because cosmetic procedures submitted as functional or disease-based have a negative cost impact on patients, insurers and purchasers, it is important to establish whether a soft tissue grafting procedure is being done solely on a cosmetic basis or if there is an actual disease-based need to augment the gingiva.

Background and Summary of the Evidence

The width of the attached, keratinized gingiva varies in different individuals and on different teeth of the same individual. Recession refers to the location of the gingiva and not its condition. Recession may be localized to one tooth, a group of teeth, or it may be generalized throughout the mouth. Sites with gingival recession are more likely to continue to recede in patients not receiving regular dental care and/or in those patients with poor oral hygiene.

There is conflicting evidence to support what quantifies as an “adequate” amount of attached, keratinized gingiva to support the maintenance of periodontal health. Some studies suggest that anything less than 2 mm of attached, keratinized gingiva will

contribute to clinical inflammation, the potential for gingival recession and associated loss of clinical attachment. Other studies have challenged that view and concluded that it is possible to maintain healthy marginal tissues in areas that would be considered to be deficient in the quantity of attached, keratinized gingiva by patients who practice excellent oral hygiene. The recently released “AAP Consensus Statement on Mucogingival Conditions” does define an inadequate amount of keratinized tissue as less than 2 mm of width of which less than one mm is attached gingiva. It is imperative to note however that a minimal amount or absence of attached gingiva alone is not a justification for gingival augmentation.

The indications for treatment now becomes a question of clinical opinion and, as noted previously, many factors enter into the decision whether soft tissue grafting is appropriate to address a particular patient’s current and future needs. There are many different periodontal surgical modalities to correct (i.e. cover denuded root surfaces) and/or inhibit further gingival recession and loss of attachment apparatus. However, the purpose of this paper is not to discuss the advantages or limitations of each of the surgical modalities but rather to make note that soft tissue surgical outcomes are predictably successful. When considering combination therapy (i.e. soft tissue grafting in conjunction with guided tissue regeneration) versus soft tissue grafting alone, conventional periodontal plastic surgical procedures, especially in the treatment of shallow buccal recessions, have resulted in statistically better outcomes related to root coverage and width of attached, keratinized gingiva.

Position Statement:

The currently available scientific literature supports the need for soft tissue grafting when the recession is progressive, when minimal amounts of keratinized gingiva are present (2 mm or less of which less than 1 mm is attached gingiva), when tooth position and restorative factors are considered, and when there is concomitant inflammation. Surgical techniques to increase the width of the attached, keratinized gingiva are among the most predictable procedures and the question begs as to how to best determine when soft tissue grafting is being delivered to address functional or disease-based need rather than primarily for cosmetic purposes. Standard diagnostic tools including radiographs and charting are not always helpful in establishing the distinction between functional or cosmetic purposes.

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