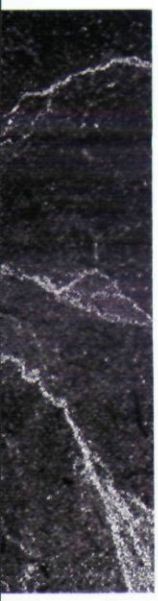

Ask the Experts

NONCARIOUS CERVICAL LESIONS: GRAFT OR RESTORE?

Guest Expert
Edward P. Allen, DDS, PhD*

QUESTION: How does one decide the best treatment—restorative versus periodontal—for a noncarious cervical lesion?

ANSWER: Unfortunately, treatment of noncarious cervical lesions tends to be dictated by the training of the involved clinician. In other words, general dentists tend to think "restoration" first, and periodontists tend to think "root coverage" first. However, each case should be evaluated methodically using the guidelines below.

When to graft:
- There is no attached gingiva.
- No enamel defect is present.
- There is Class I or II recession, that is, there is no loss of interdental bone or soft tissue.
- Papilla length and fullness are adequate.
- Esthetics is important.

When to restore:
- There is adequate attached gingiva.
- The defect is mainly in enamel.
- The lesion is deeper than 2 mm horizontally.
- There is Class III recession, that is, there is some loss of inter dental bone height or soft tissue fullness, making complete root coverage not possible.
- Esthetics is not of primary importance.

When to graft *and* restore:
- There is no attached gingival.
- There is a defect in the enamel.
- Recession is significant (≥ 2mm).
- Papilla length and fullness are inadequate.
- Esthetics is important.

An example is shown in Figures 1 to 9.

Soft tissue grafting has improved dramatically over the past 20 years. Complete root coverage now is a predictable outcome for Class I and II recessions, even in the presence of root surface defects. The esthetics achieved with current procedures is such that the treated site is often difficult to detect. The introduction of AlloDerm (LifeCell Corporation, Branchburg, NJ, USA) as a substitute for palatal donor tissue now allows for the treatment of gingival recession without the need for a second surgical site. This advance removes an obstacle that had prevented many patients from completing recommended care and caused them to instead choose a less desirable alternative (such as a root surface restoration).

DISCLOSURE

The author does not have any financial interest in the company whose materials are discussed in this article.

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Figure 1. Asymmetric gingival level owing to gingival recession in a patient with a moderately high lip line.

Figure 2. Composite restorations have been placed on the root surface of the right canine, lateral incisor, and central incisor.

Figure 3. The root surface restorations have been removed in preparation for soft tissue grafting.

Figure 4. An AlloDerm graft has been placed over the exposed root surfaces in a surgically created supraperiosteal pouch.

Figure 5. After the allograft has been sutured within the pouch, the pouch is coronally positioned to completely cover the allograft and is secured with 7-0 polypropylene sling sutures.

Figure 6. Two weeks postsurgically. There is complete root coverage and minimal morbidity.

Figure 7. Four weeks postsurgically. There is an advanced stage of healing and stability of the surgical site.

Figure 8. One year postsurgically. There is complete coverage of the roots previously treated with composite bonding.

Figure 9. One year postsurgically. A significant improvement in esthetics has been achieved by restoring natural tooth form through root coverage grafting. The recession involving the left side will be treated at another time.

SUGGESTED READING

Cummings LC, Kaldahl WB, Allen EP. Histologic evaluation of autogenous connective tissue and acellular dermal matrix grafts in humans. J Periodontol 2005; 76:178–186.

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Shanelec DA. Periodontal microsurgery. J Esthet Restor Dent 2003; 15:402–407.

Woodyard JG, Greenwell H, Hill M, et al. The clinical effect of acellular dermal matrix on gingival thickness and root coverage compared to coronally positioned flap alone. J Periodontol 2004; 75:44–56.

Editor's Note: If you have a question on any aspect of esthetic dentistry, please direct it to the associate editor, Edward J. Swift Jr, DMD, MS. We will forward questions to appropriate experts and print the answers in this regular feature.

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