The ubiquitous case report

Case reports are among the most frequent contributions received by journal editors. Although they can sometimes make an important contribution to the literature by bringing a new or unusual condition to the attention of the readers, or by describing the successful use of a new or modified technique, there are also inherent dangers in their publication. This is particularly true in the latter instance.

Insufficient length of follow-up is an important consideration in any report dealing with therapy. For example, recurrence of lesions, failure of restorations, or loss of implants is time dependent. Certain types of pain are episodic and “recovery” may be unrelated to the treatment. And then how does one deal with the placebo effect when there is no control? All of this means that there is a need to be extremely cautious in using a single case report as the basis for now treating your patients. This is particularly true when the potential outcome is more serious than a fractured restoration or a broken prosthesis.

A good example is to be found in the case report entitled “Bilaminar connective tissue graft as an alternative treatment of leukoplakia: Case report” published in the January 2007 issue of this journal. In this report, the proposed treatment was “based on the fact that some investigators have demonstrated that the epithelial characteristics are dependent upon the nature of the mesenchyme of the underlying connective tissue.” However, these studies involved normal and not abnormal epithelium. Therefore, the findings may not be applicable to a pathologic tissue. Moreover, there are other factors that could explain the positive result in this case. Some leukoplakias will resolve merely from removal of the causative irritant. In this case there is no indication of a possible etiology. Also, what effect merely elevating the gingival flap might have had is also unknown.

However, since the result was successful, should it matter if the theory on which the treatment was based may not be correct? The great danger lies in the accuracy of the diagnosis. Even though a biopsy was done, it involved only one small area of a large lesion and other areas could have been more dysplastic. Fortunately for this patient, the diagnosis was probably accurate, but if not the result could have been disastrous. This is a situation that others may face if they decide to follow the treatment recommended in this report.

The lesson to be learned from case reports such as this is that clinicians need to be very careful in recommending therapy for potentially dangerous conditions until they have a sufficient number of successful cases with adequate follow-up to substantiate their claim. For editors the lesson is to carefully evaluate any single case report involving therapy that is recommended for publication. As the old saying goes, “One swallow does not make a summer.”

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