

## Commentary: Uncovering labially impacted teeth

D.P. Mathews, DDS

There has been a paucity of information in the literature concerning the management of labially impacted maxillary anterior teeth, and this well-done article provides a refreshing look at two surgical techniques – apically positioned flap and closed-eruption – for uncovering impacted teeth. With a few modifications, Vanarsdall and Corn's work<sup>1</sup> has stood as the hallmark on this subject.

The authors do an excellent job detailing the various periodontal and esthetic parameters. Although the limited sample size and small number of clinicians could be criticized, the findings match my clinical observations over the last 20 years.

Either technique, performed improperly, can have unfavorable sequelae, and problems most certainly develop with improper orthodontic management. The main problems I have seen are too rapid extrusion and improper force direction. Rapid eruption can lead to attachment loss and recession, especially in the APF cases. With CE cases, it is imperative to mimic the "natural" eruption through the ridge crest. With improper mechanics the tooth can erupt through the mucosa or too close to the mucogingival junction, resulting in attachment loss and inadequate gingiva.

The orthodontist should actively communicate with the surgeon to determine the appropriate uncovering technique. Some cases are best treated

with the CE technique while others must be treated with APF to allow access for the appropriate mechanics to erupt the tooth.<sup>2</sup> The surgeon should take detailed surgical notes and an intraoral photograph when the tooth is uncovered. This information helps the orthodontist determine the appropriate mechanics, especially with CE cases and palatally impacted teeth.

An interesting finding in this research is the preponderance of vertical relapse in APF cases. Again, my experience is consistent with this in high, labially impacted cases. An interesting question is whether fiber release or longer retention would nullify this tendency. Further research would be helpful. Not surprising was the finding that the CE technique produced a better esthetic result.

In 1977, Vanarsdall and Corn challenged us to "initiate research in the area so that a better understanding of the soft tissue reaction to tooth movement can be achieved." This article answers that challenge and should open the door for further study. Many of us would welcome more research comparing other arenas of periodontal surgery, such as fiber release, frenectomy techniques, and uncovering other impacted teeth, and their effects on orthodontic results.

*D.P. Mathews is a periodontist in Tacoma, Wash.*

### References

1. Vanarsdall R, Corn H. Soft tissue management of labially positioned unerupted teeth. *Am J Orthod* 1977;72:53-64.
2. Kokich VG, Mathews DP. Surgical and orthodontic management of impacted teeth. *Dent Clin North Am* 1993;37(2):181-204.