Two-stage esthetic crown lengthening

By Michael Sonich, DMD, Stephen Rothenberg, DMD and Debby Heang, DMD

A smile that is perceived as unattractive mars confidence, sociability and self-regard. For some patients, the lack of visual appeal stems in large part from a "gummy smile," which a layperson begins to consider disharmonious when there is 5 to 7 mm of gingiva displayed.1 Management of such a complaint often entails both periodontal and restorative therapy, if not also orthognathic surgery and facial plastic procedures.

The following report showcases two-stage esthetic crown lengthening and resultant esthetic rehabilitation for the treatment of a gummy smile.

Patient History

A medically and periodontally stable 40-year-old female presented with excessive, asymmetric gingival display of 5 to 7 mm upon smiling, short clinical crowns and incisal wear from tooth #4 to #15 (Figs. 1, 2). Due to attrition and the relationship between the dentition and periodontal drape, the anterior teeth appear square-shaped and "masculine."2,3 Diagnoses included (1) Coslet Type I A altered passive eruption, evidenced by a wider-than customary dimension of keratinized gingiva and an alveolar crest at least 1.5 mm apical to the cemento-enamel junction (CEJ); and (2) vertical maxillary excess.2,3 The patient also presented with excessive, asymmetric gingival display of 5 to 7 mm of soft-tissue display to the cemento-enamel junction.

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In order to correct the lip line asymmetry and further diminish gingival display, neumorus-culiar lip correction (lowering) with BTX-A was reconsidered, but the patient did not pursue treatment. Six years after veneer placement, the patient remained satisfied with the functional and aesthetic result achieved solely through periodontal surgery and prosthetic rehabilitation (Figs. 15, 14).

Postoperative instructions After each surgical procedure, the patient was instructed to take up to 600 mg of ibuprofen every 4–6 hours, hydrocodone 7.5 mg/acetaminophen 750 mg at least two weeks after the gingivectomy.

Suture removal occurred at 10 to 14 days post-surgery. CT

References

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