

## PEARLS

### In-Office Fabrication of a Flipper

**U**pper lateral-incisor agenesis occurs in the permanent dentition in .8-2% of the population.<sup>1</sup> Preservation of an edentulous lateral-incisor space after orthodontic treatment, in anticipation of a permanent restoration, can be challenging. Traditionally, the orthodontist has retained such a space through full-time wear of a Hawley retainer with an attached pontic, but that approach has limitations. For example, patients dislike the unsightly metal labial bow, and the pontic frequently breaks off the retainer or fails to maintain the root angulation of the adjacent central incisor and canine.

In a previous article, I presented a chairside method for creating a lateral-incisor pontic using flowable resin and a mixing pad.<sup>2</sup> This Pearl describes a similar technique for making a highly esthetic flipper that will adequately preserve the lateral-incisor space and the root angulation of the adjacent teeth.

#### Technique

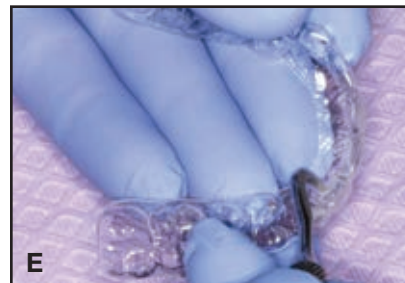
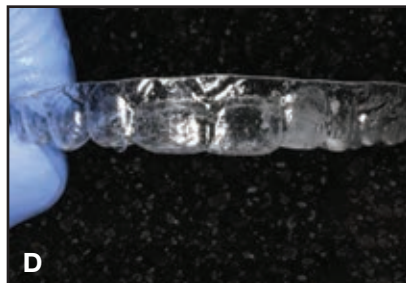
The procedure is demonstrated in an adoles-

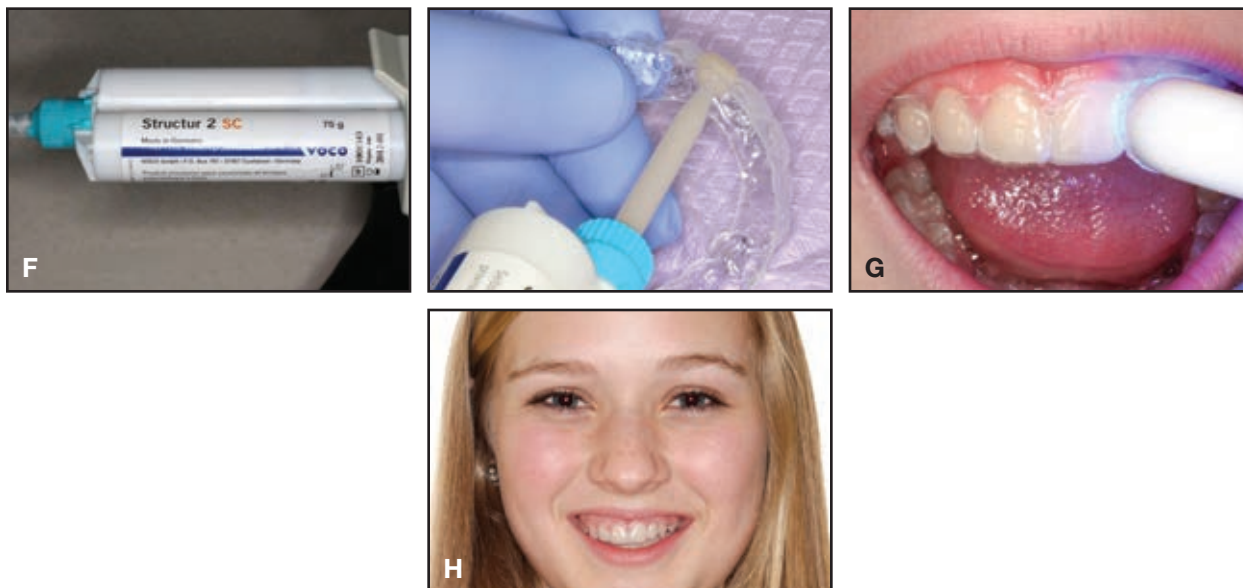
cent female patient on the day of her debonding (A). (A video demonstration is available on the JCO Facebook page or by following the link within this article at [www.jco-online.com](http://www.jco-online.com).)

After confirming adequate space for the lateral incisor and proper root angulation of the adjacent canine and central incisor, the patient is debonded. Lingual retainers (2-1-1 and 3-4) are bonded on either side of the missing tooth to secure the root positions in case of non-compliance with the removable retainer. An impression is then taken and a cast is poured in slurry yellow stone.

Using flowable resin, a pontic is built and light-cured on the working cast (B). I like to accentuate the transitional angles of the pontic for improved esthetics. Essix A+\* or ACE\* plastic is then vacuumformed over the cast and the pontic (C). The plastic retainer is cut away and the pontic removed (D); the resin pontic will not stick to the Essix\* retainer. It is important not to trim below the gingival margin of the pontic. A small pinhole is made with a scaler in the cingulum of the pontic space for mechanical retention (E).

\*Registered trademark of Dentsply Raintree Essix Glenroe, Sarasota, FL; [www.essix.com](http://www.essix.com).





At the chair, Structur 2 SC\*\* (VITA shade A2), a fast-setting temporary bis-acrylic crown-and-bridge material, is applied in the pontic space of the retainer (F). The retainer is immediately seated in the mouth, and the facial and lingual surfaces of the pontic are light-cured (G). The patient should bite firmly on the retainer during the initial cure to ensure proper fit; the retainer should not be removed from the patient's mouth for at least five minutes to allow full curing. (In the photograph, the patient's mouth is open for demonstration.) The Structur 2 SC material adheres to the Essix retainer walls, and the interproximal contacts firmly support the adjacent teeth. The entire procedure takes about 20 minutes.

### Conclusion

This in-office flipper can be expected to last six to 12 months. It is affordable, highly esthetic, and sure to please any patient who might be anxious about leaving the office with an edentulous space on the day of debonding (H).

\*\*VOCO America, Inc., Indian Land, SC; [www.voco.com](http://www.voco.com).

### REFERENCES

1. Altug-Atac, A.T. and Erdem, D.: Prevalence and distribution of dental anomalies in orthodontic patients, *Am. J. Orthod.* 131:510-514, 2007.
2. Kravitz N.D.: Immediate pontic fabrication using flowable resin, *J. Clin. Orthod.* 50:177-178, 2016.



NEAL D. KRAVITZ, DMD, MS  
Associate Editor for Pearls  
25055 Riding Plaza, Suite 110  
South Riding, VA 20152  
[nealkravitz@gmail.com](mailto:nealkravitz@gmail.com)