

(Editor's Note: If you have a clinical or practice management Pearl to share with your colleagues, send it to JCO, 1828 Pearl St., Boulder, CO 80302. Appropriate illustrations are welcome; a photograph of the author and a copyright transfer form are required prior to publication.)

## Hot-Water Bath Facilitates Ceramic Debracketing

hen orthodontists remove metal mesh brackets, we peel them off. similar to removing a pop-top on a can. Attempting the same method with sapphire brackets places an excessive load on the teeth. Because sapphire is harder than any material except diamond, it does not flex. Consider how workmen remove Formica countertops: they heat the surface first to soften the underlying adhesive, then peel the material away at the glue layer. That's how we remove ceramic orthodontic brackets in my office.

Metal brackets are removed first—still tied to the arches—and then the sapphire brackets are untied. The patient is given a mug of plain hot water with instructions to hold the water in the mouth for one minute without swallowing, while allowing the water to cover the front teeth (A). We keep a coffeemaker in the reception area with hot water for tea, hot chocolate, or debonding, so we always have water available at a safe temperature.

Immediately after the patient swallows the hot water, a cotton roll is placed between the teeth to be debonded, and the patient is instructed to bite down hard and hold it in place. This provides a firm, resistant platform. Then we use a vinyl debracketing plier\* to squeeze the occlusal and gingival bracket wings of each ceramic bracket (B).

The difference between this method and others is that we don't fracture or bend the sapphire; we peel away the glue, not the bracket. Sometimes it seems to take 30 seconds instead of one second, but in most cases the adhesive peels off the back of the brackets, leaving pads of adhesive on the teeth (C). Of course, we have a few brackets that resist and need to be polished off, using Brasseler diamond burs with copious water and air. But most brackets come off cleanly, with only the adhesive left behind-quite the opposite of metal brackets.

We have used sapphire anterior brackets ("A" Company Starfire, now Ormco Inspire\*) since 1986 on virtually all patients' anterior teeth. Out of these thousands of teeth, we have *never* had a fractured tooth, fractured enamel, or any iatrogenic damage. This hot-water bath works for any brand of ceramic brackets.

\*Inspire debonding instrument, Part No. 803-0205 (free with Inspire brackets), Ormco/"A" Company, 1717 W. Collins Ave., Orange, CA 92867.









RICHARD N. CARTER, DMD, MS 3250 N.W. 185th Portland, OR 97229 drdcarter@mac.com