



## First Impressions of APC™ Flash-Free Adhesive: What To Do with the Free Time?

by Dr. Mohammad Razavi



Dr. Mohammad Razavi received his dental training at Case Western Reserve University – DDS ('02),

orthodontic certificate ('05), and MSD ('05). Upon completion of his orthodontic training, he was invited to join the department as an assistant clinical professor, where he founded and directed the Skeletal Anchorage Clinic, and has integrated various TAD systems into the training program. He is a member of the craniofacial team at the Cleveland Clinic Foundation, and has served as the orthodontist for the Cleveland Browns. Dr. Razavi is a diplomate of the American Board of Orthodontists, a Fellow of the Royal College of Dentists in Canada, and an ad hoc reviewer for the American Journal of Orthodontics, and the Journal of Clinical Orthodontics. Dr. Razavi maintains a private practice in Ottawa, Canada.

For years we accepted cleaning excess cement around orthodontic brackets as an unavoidable obstacle of orthodontic practice. Fearing the consequences of this excess flash of cement, such as white spot lesions, possible caries upon debonding the brackets, and staining around bracket margins, we employed the use of pre-pasted and color-changing adhesives to improve our ability to remove these bacteria traps. In fact, the obsession to remove all the flash surrounding each and every bracket led to significant inefficiencies during direct bond procedures, as we constantly knocked the bracket away from its ideal position. Yet, we all accepted this annoyance as a part of being a conscientious orthodontic professional, never questioning if there was a way to eliminate this excess cement. How else would we “cement” the brackets onto the enamel surface?



### A New Era in Bonding

When my 3M Unitek representative handed me the first five brackets with new APC™ Flash-Free Adhesive for my evaluation, I quickly placed three of them onto extracted teeth. Then I heard her ask me, “What exactly are you doing?” I realized, based on a series of pre-programmed motions that had been engrained into my subconscious, I was running the tip of my scaler around the edges of each bracket, attempting to remove the non-existent excess cement, just as I had been doing for years, up to this day.

Immediately, I was hooked! My mind raced with the implications of incorporating this technology in our practice. Imagine the time saving during a bonding procedure using this new pre-pasted bracket, where the 28 positioned brackets had to be positioned only once. We would no longer repeatedly disturb their position in an attempt to remove the flash. But could we employ our existing bonding protocol and tooth preparation? Would we get the same bond strength?

We started our clinical evaluation of APC Flash-Free adhesive in the last quarter of 2012. I was pleased to see the brackets arrive in individualized packages similar to APC™ II Adhesive. We were able to employ our existing preparation protocols, and simply had to switch the bracket blisters from our old bonding trays.



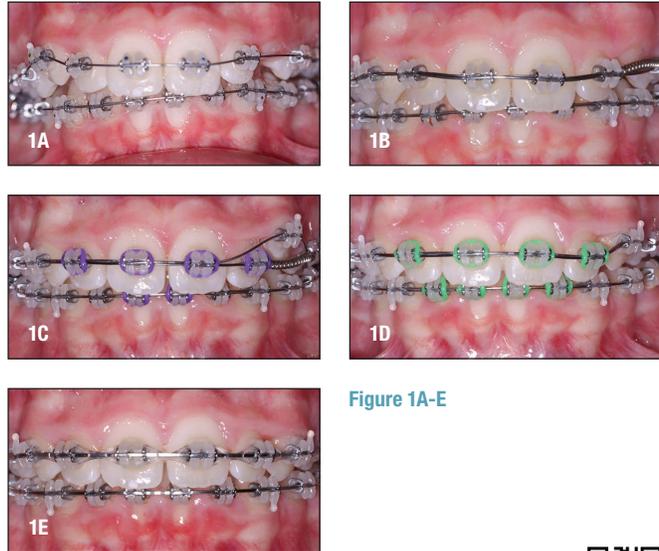
It took only a few minutes to adapt to the fact that there is no flash clean-up with the APC Flash-Free adhesive coated brackets. Of all the products we have introduced into our office in recent years, APC Flash-Free adhesive had the simplest learning curve by far.

We quickly noticed that patient chair-time in our office was reduced significantly. In our video-taped trials, we consistently had shortened times during the placement and positioning stage of the brackets. This time savings will allow us to reduce our allotted time for a direct full upper and lower bond procedure from 90 minutes to about 70 minutes. A 20 minute saving per patient, over the course of a full day, is a saving of 60-80 minutes.

The shorter initial bonding appointment works toward our goal of improving the patients' overall experience, especially at the beginning of the treatment. In addition, the requirement for "Doctor Time" is reduced during this appointment, freeing up this resource for more productive use. The patient experience is also enhanced during the course of the treatment, as the adhesive agent does not stain (Figure 1A-E), unlike the excess cement that was often left on teeth with previous luting agents. Moreover, the patients have enjoyed the benefits of a strong, reliable bond strength, since only one of the nearly 200 brackets placed so far had unintentionally debonded.

My entire clinical team was blown away by the potential implications of using APC™ Flash-Free Adhesive as the bonding agent. Team members commented: "Testing them really spoiled me; now even pre-pasted brackets seem like a lot of extra work and time to clean up all the flash." "Initial placement is great. The first contact between the adhesive and tooth sticks much better when compared to other adhesives."

In future months we will continue to document the treatment progress of patients we treated with the APC Flash-Free adhesive. We will be able to report bond failure rates, hygiene implications, and debonding and removing the cement. In addition, we will continue to determine the practice management impact of using APC Flash-Free adhesive. Look for future publications for more information on this product, which I feel is certain to revolutionize orthodontic bonding.



Case photos provided by Dr. Mohammad Razavi.

