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FDI, FOLA, DTI launch campaign for Haitian dentists

By

Javier M. de Bison, DT Latin America

PANAMA CITY, Panama — The president of the Haitian Dental Association, Dr. Samuel Prophet, has told Dental Tribune Latin America that he and several colleagues are fine after the devastating earthquake in his country.

"So far, we have reports of only two missing dentists," Prophet wrote in an e-mail a couple weeks after the quake.

The earthquake not only devastated Haiti's meager health resources, but also most dental practices. In a country where there were only 500 dentists for 9 million people before Jan. 12, the extent of the devastation has affected everyone.

The president of the Latin American Dental Federation (FOLA), Dr. Adolfo Rodríguez, launched a campaign immediately after the quake to help both the general population and dental professionals in Haiti.

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Polishing up your orthodontic finish

Simple, three-step system improves clinical efficiency

By S. Jay Bowman, DMD, MSD

The Axis Orthodontic Adhesive Removal Set* (featuring a series of three polishing devices) was designed to both effectively and efficiently remove adhesives and cements after the completion of orthodontic treatment and to produce a smooth final enamel finish.

This set consists of the following components: 1) H375R-016 (7675) Red Carbide, a gross adhesive removal bur; 2) H246L-012UF White Finishing Carbide, a 30-fluted finishing bur; and 3) P0153-031 Polisher, a green polishing point. All are conveniently maintained in an aluminum bur block that can be sterilized.

These three devices can be used with either low- or high-speed friction-grip dental handpieces (including electric handpieces). Using a high-speed handpiece to remove adhesives is more comfortable for patients due to reduced vibration compared to that from a slow speed. Lower vibration also produces a smoother surface finish.¹

Clinical efficiency is improved



Fig. 1: After orthodontic appliances have been removed, a (red) carbide bur (H375R-106-7675), installed in a high-speed dental handpiece, is used to dislodge gross, residual resin.

with this simple, three-step system as a single contra-angle handpiece can be employed for the entire removal/finishing process.

After orthodontic appliances have been removed, the 7675 Carbide (Red) is used in a contra-angle dental handpiece to dislodge gross residual resin tags from the enamel (Fig. 1).

This round-end, tapered 12-blade bur is ideal for removing both orthodontic bonding adhesives and also cements that remain on the teeth after de-bracketing and de-banding. Eliades et al.² concluded that, "carbide burs are ideal cutting tools for

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Facing the facts

Differences between dental CBCT and medical CT scans

By Dr. Bruce Howerton

Before a practitioner performs surgery, he or she should be equipped with up-to-date knowledge regarding the possible conditions located under soft tissue within the oral cavity.

Three-dimensional data generated by cone-beam computed tomog-

raphy (CBCT) technology offers a "surgical view" or slices of the entire field of view from the front, side and under the patient. Cone-beam scans assist with determining bone structure, tooth orientation, nerve canals and pathology; in some cases it may preclude the necessity for a surgical procedure.

In the past months, media sources have published articles regarding high exposure of radiation from medical CT scans.

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ductile substrates such as resins.” Phil Campbell’s Angle Research Award publication¹ reported the “tungsten carbide bur appeared to be the most efficient method of removing highly filled resin, and it produced the least amount of scarring.”

The tapered design of this bur makes it easy to manipulate on facial surfaces of enamel while reducing the potential for gingival impingement. Enamoplasty of uneven incisal edges is also done at the same time (Fig. 2).

This bur is ideal to remove composite attachments that are often employed with Invisalign.

Gross removal of residual adhesives and cements should be accomplished without disturbing enamel anatomy by over-polishing the surface. Residual resin is often visible on enamel surfaces after the air exhaust from the high-speed contra-angle desiccates the surface of the tooth. The consistent torque and low vibration of an electric dental handpiece (at 35-40,000 rpm) can also help to provide a more comfortable and consistent result.

After gross residual composite or cement is removed, the White Finishing Carbide, a long, flame-shaped 30-blade bur, is used to remove the last remnants of adhesives while also finishing the enamel to a smooth surface.^{1,2} The versatile, pointed shape of this bur allows positioning at the gingival margin (Fig. 5).

The 30-blade carbide produces a very smooth surface during the finishing process that is followed with the P0153-031 Polisher, a green friction-grip (FG) silicone point, to refine the enamel (Fig. 4). These polishers can be used in the same high-speed handpiece as the previous carbides, but at slow revolutions as the silicone will degrade quickly.

A feathering, light touch is required to reduce the buildup of heat and to avoid degradation of the polisher. After a suitable enamel surface is achieved, any additional final finishing can be performed using polishing pastes or slurry of fine pumice if needed (Fig. 5).

* Dr. Jay Bowman developed the AXIS Orthodontic Adhesive Removal Set; available from Axis Sybron Dental Specialties (800 W. Sandy Lake Road, Suite 100, Coppell, Texas 75019; (888) 452-8879; e-mail: custser@axisdental.com). OT



Fig. 2: Incisal edge irregularities and mammelons can be addressed with the same (red) carbide bur.



Fig. 3: Refinement and polishing of the enamel surface is accomplished with a long, flame-shaped 30-fluted (white) carbide bur (H246L-012UF) in the same high-speed handpiece.



Fig. 4: Further polishing of the enamel surface is done with a P0153-031 Polisher, a green friction-grip (FG) silicone point.



Fig. 5: After the completion of adhesive removal and enamel polishing with the Axis Orthodontic Adhesive Removal Set.

OT About the author



Dr. S. Jay Bowman is a diplomate of the American Board of Orthodontics, member of the Angle Society




of Orthodontists and Pierre Fauchard Academy, and a fellow of the American College of Dentists. He is an adjunct associate professor at Saint Louis University, an instructor at The University of Michigan and adjunct clinical professor at Case Western Reserve University. Bowman has developed and patented a number of innovations for clinical orthodontics, including his own Butterfly Bracket System and other appliances. He has published more than 85 articles, book chapters and a textbook on mini-screw anchorage, has lectured in 27 countries, and has maintained a private practice for more than 25 years.



Fig. 6: All of the devices in the Axis Orthodontic Adhesive Removal Set are conveniently maintained in an aluminum bur block that can be sterilized. They may all be used in either slow- or high-speed handpieces (including electric high speed).

References

1. Campbell, PM. Enamel surfaces after orthodontic bracket debonding. *Angle Orthod.* 1995;65(2):103-110.
2. Eliades, T; Gioka, C; Eliades, G; Makou, M. Enamel surface roughness following debonding using two resin-grinding methods. *Eur J Orthod* 2004;26:333-338

			
MFG. NO.	P0153	H375R	H246L
SIZE 1/10mm	031	016	012
LENGTH (mm)		8.0	5.4
Description	green	red	ultra fine
Shank	FG (31)		

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