Looking back on AAE17

Annual session in New Orleans gives endodontists plenty to celebrate

By Fred Michmershuizen, Managing Editor

The 2017 annual session of the American Association of Endodontists — AAE17 — offered the perfect opportunity for attendees to partake in educational offerings, to learn about the latest technological advances and to have some fun. The lecture halls offered a wide range of possibilities, and there were lots of products and new technology available from exhibiting companies.

The meeting, held April 26 to 29 at the Ernest N. Morial Convention Center, gave endodontists a chance to talk shop, to make new friends and reconnect with school colleagues, and to recharge batteries.

During the President’s Breakfast, AAE President Dr. Linda G. Levin summed it up well when she reminded her fellow specialists of their important work by saying, “Saving teeth is what we do — and we do it well.”

In what will certainly be considered a highlight of AAE17, two live endodontic microsurgeries — one mandibular, one maxillary — were performed by Dr. Syngcuk Kim as hundreds of attendees watched in 3-D.

The General Session featured local residents James Carville and Mary Matalin, who regaled attendees in a no-holds-barred back and forth on today’s charged political climate.

The story of Munce Discovery Burs

By C. John Munce, DDS, FICD

From the time I completed my residency in 1988, and even into the early 2000s, no long/stiff/narrow-shafted troughing bur existed. To meet this ongoing need for a troughing bur, in 2003 I began modifying the shafts of existing latch-type, slow-speed round carbide burs by necking them down at chairside as needed for a specific clinical case (Figs. 1, 2).

At that point, it had never been my intent to venture into the bur design and manufacturing arena, but during the next year I was told by colleagues who had been at the Dallas AAE that they still had that sample bur, and sometimes they would pull it from a pocket to prove it. They explained how they jealously guarded the bur from clinical staff members for fear that it could be misplaced, leaving them seriously handicapped. They begged me to manufacture these burs for them, as they confessed they were never going to make them at chairside as I had demonstrated.

I already had a small clinical products company, CJM Engineering, and so in early 2006, after trying to literally “give” the troughing bur idea to several bur manufacturing companies without success — in one instance, the new-products committee of a large dental bur company concluded there was simply no market for such a bur — I decided to begin manufacturing and distributing these burs myself through CJM Engineering (Fig. 3), still the manufacturer and exclusive worldwide distributor of Munce Discovery Burs today.

Here’s a timeline of the introduction of significant features of the Munce Discovery Bur line since its inception. Each of the modifications was born of my own experience:

• See MUNCE, page D2
encre in applying these burs in diverse clinical circumstances combined with the freely offered suggestions and requests for modifications from colleagues around the globe.

2006
A friend in the dental instrument manufacturing business, Lonnie Graybull of Integra-Millect, suggested the name, Munce Discovery Burs, and it stuck.

The Munce Discovery Bur line started with 34-mm-long burs only, and in only four head sizes: #1/2, #1, #2 and #4 (Fig. 3):

• At that time, we produced only the 1-mm-diameter shaft on all four head sizes.

2007
We added the 39-mm-long Shallow Troughers to the line:
- To distinguish the two different lengths, we began referring to the burs as Munce Discovery Bur Deep and Shallow Troughers.
- We added our tiniest head size, #1/4 with a head diameter equal to a tip of a #50 K-file — and a 1/8-inch head size, to both Deep and Shallows.
- We added 3 mm “sounding” shafts on the Deeps.
- We introduced the 31-mm-long #6 Endodontic Cariesectomy Bur.
- Although “trenching” as an end-specific operation associated with ultrasonic tips was already developing its own vocabulary within the endodontic community, the specific vernacular for trenching when using burs was different and was yet to be developed. Terms we introduced or refined to apply to trenching when using Munce Discovery Burs included:

View corridor — the view beyond the handpiece head to the target area, which is much improved with 31- and 39-mm-long, narrow-shafted burs because the extra length draws the handpiece head away from the target area, and the decreased diameter of the shaft puts much less visual “noise” into the view corridor (Figs. 4a, b).

Shaft impingement — occurs on access cavity walls with a 2.35-mm-diameter shafts of standard slow-speed burs. This problem is greatly reduced with the narrow shafts of Munce Discovery Burs (Figs. 4a, b).

Target area — that place where the head of the bur is to perform its work, and the target area becomes much more visible because of the longer/narrower/smaller head as mentioned above.

Shaft stiffness — a necessary feature of the positive control provided by these burs. Other long-shafted burs have shafts that are too narrow, sacrificing control and leading to “noodling” under trenching and other operations (Fig. 5).

Noodling — not a feature of the Munce Discovery Burs. This undesirable feature was specifically designed out of the Munce Discovery Bur shafts (Fig. 5).

Heatless and virtually non-breakable — important features that distinguish these burs from ultrasonic tips.

2010
For ease of head-size identification, we added color bands on the shafts (Fig. 6).

2015
We reduced the shaft-diameter to 0.7 mm on the last 10 mm of the three smallest head sizes in both Deep and Shallows (Fig. 6) to facilitate deeper exploration.

Shaft parallel cement-line dissection (Fig. 7). Although 0.7 mm is very narrow, the specific geometry maintains the trademark stiffness of the shaft and facilitates cement-line dissection around posts and silver points while the shaft of the bur is virtually parallel to the long axis of the post or silver point. Shaft-parallel cement-line dissection is completely impossible with 2.35-mm-diameter shafts of standard slow-speed burs.

2017
A cotton plier insertion ledge (Fig. 6) was added at the transition from the 2.35-mm-diameter portion of the shaft to the 1-mm-diameter portion to facilitate ease of insertion of the bur into the spinning handpiece while protecting the color band from abrading under slippage of the cotton plier, which would otherwise occur.

We modified the head geometry (Fig. 6) to prevent catching on the outstroke when planing dentin walls, reducing the risk of lodging and perforation.

At that time, we produced only the first edition of Munce Discovery Burs.

• We added the 31-mm-long Shallow Troughers to the line.

From necessity, to idea, to sketch-on-a-napkin, then invention, technical drawing, prototyping, bench-testing, collegial input, tweaking, manufacturing, marketing, and worldwide distribution, CIM Engineering has always listened to the needs of clinicians in our specialized discipline and endeavored to be the best that we can be in the multifaceted process of not just being a pass-through for somebody else’s products but rather a company that delivers previously nonexistent, high-quality products invented by an endodontist for endodontists and endo-savvy dentists worldwide.

Although it may seem to be a simple product at first glance, in reality, a truly complex instrument such as this doesn’t just roll off of a bur company’s production line. It requires ongoing, open-ended research that is supported by an industry-funded organization.

In that time, the trademark stiffness of the shaft and facilitates cement-line dissection around posts and silver points while the shaft of the bur is virtually parallel to the long axis of the post or silver point. Shaft-parallel cement-line dissection is completely impossible with 2.35-mm-diameter shafts of standard slow-speed burs.

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