



DR.
PARKER'S
handmade
pen

What woodworking has taught me about dental instruments

Scott Parker, DDS

WHEN MY CLASSMATES AND I FIRST STARTED DENTAL

SCHOOL, one of our instructors gave us a word of advice. He told us to put away or sell any and all woodworking tools. He said to never get them back out. To drive his point home, he held up his disfigured left hand, which looked like it belonged to a long-haired head-bobber flying the rock and roll sign at a Dio concert.

But as is typical for many independent-minded dentist types, I completely ignored his advice. I had an interest in woodworking and decided to try my hand at making custom pens.

Today, it has become a wonderful hobby for me. I love the opportunity to clear my mind as I work on beautiful woods, acrylics, and even Corian (the same material they use to make kitchen countertops).

Working with these materials has taught me how to use a tool on a rapidly rotating object, which, ironically, is exactly the opposite of what we do in dentistry.

Here are some of those lessons:

1. The tool must be very sharp in order to be effective.
2. A clean tool is a more efficient tool.
3. Too much heat can ruin the object.
4. Proper protection is essential.
5. Quality is the cheapest option.
6. If you don't know where you're going, you'll end up somewhere else.

Let me now share with you a little more about each of these lessons, and you will see how they apply to our profession.



NeoDiamond burs
(MicroCopy)



Dirty bur

SHARP TOOLS ARE MORE EFFECTIVE

Dull cutting instruments are a significant problem in any occupation that uses cutting. Whether working on a tooth or creating a work of art, tools are much more effective when they are sharp. Studies have shown conclusively that cutting a tooth with a dull bur can cause an increase in the temperature of the pulp. This can lead to pulpitis and even pulpal necrosis.

The carbide steel available today is a different quality compared to many years ago. It dulls and tarnishes very quickly, and when that happens, the cutting edge becomes blunt and the rake angle changes. This means you are no longer cutting tooth structure—you are pulverizing it. When a diamond bur becomes clogged or worn, the increased friction means you can literally burn the surface that you are cutting on. And when using a dull bur, you must use even more pressure to cut. The combination of a dull bur with increased pressure will assuredly lead to a spike in temperature.

CLEAN IS MORE EFFICIENT

We are kidding ourselves if we believe that burs are truly sterile when they are run through an ultrasonic cleaner and then off to a sterilizer. Aside from the time-consuming task

of picking out burs from the drain of an ultrasonic cleaner, reusing burs after cutting away infected tooth structure is like going in for an endoscopic procedure at a clinic that does not use proper sterilization. Do you really want to roll the dice with your patients' health to save a few pennies?

Why wait for something unfortunate to happen? Using a new bur each time, you can look patients in the eye and assure them there is no chance of cross-contamination in your office. Opening a new bur will give you and your patients peace of mind. In my practice we use NeoDiamond single-patient-use diamond burs from MicroCopy with excellent results.

We have an obligation to protect our patients and ensure they are not inoculated with harmful bacteria. Protect your patients as if they were your own family members.

HEAT CAN RUIN A TOOTH

Be kind to the pulp. Avoid the increase in temperature that comes from using dull cutting tools.

PROPER PROTECTION

Wear glasses, gloves, and a mask while operating in order to protect yourself from a variety of pitfalls.

COST-EFFECTIVE

When I was younger, my father would often tell me that quality was the cheapest option. If you do something right the first time, it will save a lot of time and money in remakes and discomfort.

Considering the cost of a final impression using VPS material is about \$30 each time, the expense of a new bur is insignificant. Plus, the benefit in time-savings and reduction in trauma to our patients is more than enough to justify switching to single-use burs immediately.

KNOW WHERE YOU ARE GOING

Make a plan to implement this concept into your practice. You'll see what a difference it makes to use a fresh diamond on each and every procedure. Avoid the collateral damage that occurs from being careless. Decide today to commit to patient health and more efficient dentistry. You will not regret the decision once you realize how much less frustrating cutting a tooth can be with a fresh bur.

In closing, you will find that single-use diamonds are not only more cost-effective, they are also more efficient at cutting and will save your patients' precious pulp. And to answer the question that might be tugging at the back of your mind: Yes, I still have all my fingers in their original dimensions. **DE**

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