

What's in YOUR office?

By Bruce Cohen,
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Many people have thick onychauxic nails that are difficult to cut safely. Some of these people are considered “high risk” and are being treated for diabetes, peripheral vascular disease, and/or peripheral neuropathy and myopathies. Non-“high risk”



A 2006 study done by J.G. Burrow and N.A. McLarnon reported in “Occupational and Environmental Medicine” that electric drills create an aerosol containing bacteria and fungus that remain in the air for

up to 30 min. The healthcare worker is also potentially exposed to hepatitis B, hepatitis C, and H.I.V. The same study showed that podiatrists have four times the national prevalence of asthma and bronchitis. This very well could be due to inhaling nail dust particles without a vacuum device. So when do you use different types of burs and what is available? Many young practitioners have never been taught the differences. There are diamond, stainless steel, and carbide burs. There are crosscutting, round and barrel-shaped burs. They come fine, medium and coarse. Some can even be used on calluses. Many doctors use only one type of burr—often, simply the same type their mentors used. They have never exper-

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patients can also have nails that are thick and onychauxic due to fungal and bacterial infections, psoriasis, connective tissue disorders, and other systemic conditions. Improper nail cutting can be not only painful but may lead as well to paronychias and cellulitis. Ulcerations and amputations are still common in the high-risk patient.

Some nail conditions can be treated surgically or medically and that treatment may result in a cure, but many times a permanent correction is not possible and nail maintenance is the proper treatment. Using a manual nail cutter is only part of the process. At times onychauxic nails can be too thick to be manually debrided alone and electric debridement is medically necessary. With the appropriate burr and drill with a vacuum, electric debridement can be done safely for both the patient and the doctor. A sharp, thick mycotic nail can be safely treated with less pain to the patient with the proper tools. Using the right burs saves time for the doctor too.



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imented with different types of burs. Some healthcare workers are still using an old-fashioned Dremel drill. If a serious medical complication were to develop from an old-fashioned



Dremel drill or industrial burr, it would be difficult to defend in a court of law.



There are a few companies that manufacture good medical-grade vacuum drills and burs. BNA BURZ is the only company that has burs

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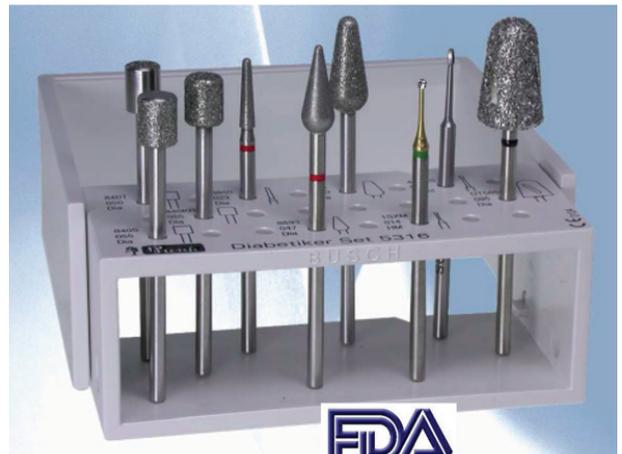
What's in YOUR office *(continued)*

and a drill that is "FDA Registered". The vacuum drill offers a well-balanced, very quiet ergonomic handpiece. The vacuum is built into the handpiece and is not a separate unit. The vacuum bag is sealed and an LED light lets the user know when the bag is full. All BNA Burrs are IEC/CE medical devices and can be sterilized by any method, including autoclaving and glutaraldehyde solutions.

So what burr should you use? The correct answer is: whichever is best for you and the patient. It's good to have a selection of different types of burrs (carbide, diamond, corundum, stainless steel). By carefully trying different burrs, practitioners will learn by experience what works best for them and will thus offer the best for their patients. Future articles will provide greater detail on burrs, suggested applications and safety design features.

References

World at work—Evidence base risk management of nail dust in podiatry
Occupational Environmental Medicine
J.G. Burro, N.A. McLarnon 2006



Use of air filtration systems in podiatry
Environmental Health
J.G. Burro, N.A. McLarnon 2002

Contaminants in human nail dust
Occupational hazard in podiatry?
J Foot Ankle Res. 2014

The Ocular Risks of Human Nail Dust in Podiatry
Millar, N.A., PhD Thesis
Glasgow, Caledonian University, 2000

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