Ultrasonics in Endodontics

Prof Liviu Steier tests the NSK Varios 970 ultrasonic device to use in endodontics

Bacteriofilm disruption, debondment and hard-tissue preparation can be successfully performed using ultrasonics. Ultrasound preparation is proven to help allow for a more minimally invasive approach. Endodontists, periodontists and general practitioners value ultrasonics for their precise application.

The new Varios 970 NSK fits into the group of ultrasonic devices that can be operated independently without connection to pre-existing water lines. This device has a dual purpose if the user prefers to use the connection.

The device
The basic part is the control unit, packed into a white plastic rectangular box with black interior sides. A black handpiece holder is mounted on the right side, behind the power switch. Two knobs are attached to the left side: the tap-water adjustment, and bottle-water adjustment. At the rear, the unit has the foot switch, AC power cord connection and tap-water connector. The black operational panel and display are set in the front of the unit. The black operational panel and display are set in the front of the unit with blue LEDs. The handpiece connector is located on the rear, the unit has the foot switch. Two knobs are attached to the left side just below the display. A black handpiece holder is mounted on the right side, behind the power switch. Two knobs are attached to the left side just below the display. The two bottles can be connected to the unit in the rear part on the upper side of the box via bottle base connectors.

The handpiece can be easily attached and detached from the handpiece cord, and might also benefit from fibre-optics if desired. The handpiece is stored in a sterilisation case together with one tip system featuring interchangeable inserts. A very special feature of NSK is the V-tips which are great for accessing the difficult tissue beneath implant restorations. Overall I am extremely happy to recommend this product to any of my colleagues but beware, like our practice, I think you may need to buy more than one!*

Bob McLelland, St Ann’s Dental, Manchester

“Using the Varios gives me the ability to achieve a more precise cavity preparation and margin refinement. The diamond coated tips are much smaller and more refined than conventional burs and it is the ideal tool for minimally invasive dentistry. The use of the single sided tips during interproximal preparation prevents damage to adjacent teeth.”

Basil Mizrahi, www.basilmizrahi.co.uk

- Twin LED handpiece delivers shadow-free illumination
- Supplied with 3 tips, 3 wrenches and an autoclavable container
- 2nd solution container allows easy exchange of irrigants
- 3 power ranges - Perio, Endo and General
- Also available as a built-in unit - Varios 170

Range of power
The power range is set to allow action levels between 40 to 100 per cent for general use, 20 to 50 per cent for endodontics and 5-55 per cent for periodontics. Of course these are only suggestions by the manufacturer and may be altered. The selected power range will be shown as a numerical display, as well as a bar graph. To change this we will need to press the touchpad power level keys located above the selected bottle.

*Business use only, subject to status.

For more information and to see the whole range of scaler tips visit www.myvarios.co.uk

A variety of options from the Varios 970

Ultrasonic scalers provide a patient-friendly and efficient way to meet the challenges of perio, endo, hygiene and minimally invasive treatment techniques. The Varios 970 from NSK, can be used for these treatments, simply by exchanging the tip - and with a choice of over 70 tips, there is one for every procedure.

“The Varios 970 offers me the scope of greater control of power and greater flexibility of use. The tips are excellent in shape and form and the tactile feel from the handpiece is as good as I have used. It has been difficult to keep the unit in my surgery, my hygienist uses it on all our implant patients, using the specifically designed tips which are great for accessing the difficult tissue beneath implant restorations. Overall I am extremely happy to recommend this product to any of my colleagues but beware, like our practice, I think you may need to buy more than one.”

Bob McLelland, St Ann’s Dental, Manchester

“Using the Varios gives me the ability to achieve a more precise cavity preparation and margin refinement. The diamond coated tips are much smaller and more refined than conventional burs and it is the ideal tool for minimally invasive dentistry. The use of the single sided tips during interproximal preparation prevents damage to adjacent teeth.”

Basil Mizrahi, www.basilmizrahi.co.uk

- Twin LED handpiece delivers shadow-free illumination
- Supplied with 3 tips, 3 wrenches and an autoclavable container
- 2nd solution container allows easy exchange of irrigants
- 3 power ranges - Perio, Endo and General
- Also available as a built-in unit - Varios 170

Range of power
The power range is set to allow action levels between 40 to 100 per cent for general use, 20 to 50 per cent for endodontics and 5-55 per cent for periodontics. Of course these are only suggestions by the manufacturer and may be altered. The selected power range will be shown as a numerical display, as well as a bar graph. To change this we will need to press the touchpad power level keys located above the selected bottle.

“Using the Varios gives me the ability to achieve a more precise cavity preparation and margin refinement. The diamond coated tips are much smaller and more refined than conventional burs and it is the ideal tool for minimally invasive dentistry. The use of the single sided tips during interproximal preparation prevents damage to adjacent teeth.”

Basil Mizrahi, www.basilmizrahi.co.uk

- Twin LED handpiece delivers shadow-free illumination
- Supplied with 3 tips, 3 wrenches and an autoclavable container
- 2nd solution container allows easy exchange of irrigants
- 3 power ranges - Perio, Endo and General
- Also available as a built-in unit - Varios 170
The ‘How to make a SUCCESSFUL CONVERSION to private practice’ Event

**CHOOSE YOUR DIRECTION**

The ‘How to make a SUCCESSFUL CONVERSION to private practice’ Event

If you’re considering converting to private practice but are unsure about how to proceed, come and join Practice Plan and our special guest, Chris Barrow for a two hour evening seminar dedicated to giving you practical and simple advice on how to make a seamless and successful conversion.

Practice Plan has helped hundreds of NHS practices across the UK to successfully convert to private practice and we’ll have experts on hand to answer all your questions and support you in any way we can.

Each event is FREE, just choose the venue that’s right for you...

**Tuesday 15th June** 6.00 pm : **Birmingham**
**Tuesday 22nd June** 6.00 pm : **Manchester**
**Tuesday 29th June** 6.00 pm : **Windsor**

To reserve your FREE place please call Jen Smith on...

**01691 684141**
or email jen.smith@practiceplan.co.uk

Special Guest:

**Chris Barrow**

If you’ve never heard Chris Barrow speak...then you’re in for a treat. If you have, then you know you can expect the kind of straight talking, no-nonsense practical advice that has helped countless dental practices to succeed and grow.

As an added bonus, the event will deliver 2 hours CPD!

"The whole process is made easy for you with Practice Plan’’

To conclude, either using the device connected to the water line or independently, the self-cleaning programme will ensure that optional biofilm formation can be avoided.

The Varios 970 can be used in Endodontics for coronal access shaping, for removal of posts, fractured instruments, energising irrigants in the canal, and even condensation of the obturation. Having two independently bottled solutions, this allows for direct irrigation and energising of the last one-speeding up the chemical disinfection process.

The result

The ultrasonic unit is extremely powerful and satisfies any requirements. The different power settings and the extremely wide variety of offered tips make the Varios 970 suitable not only for endodontics, but also for periodontology as well as restorative.

To conclude, either using the device connected to the water line or independently, the self-cleaning programme will ensure that optional biofilm formation can be avoided.

About the author

Dr Liviu Steier (PhD) is Speciali- ist fuer Prothetik (www.dgzmk. de) and specialist in Endodontics (GDC UK). He is an honorary clinical associate pro- fessor at Warwick Medical School and course director of the MSc in Endodontics (www.war- wick.ac.uk/odont). He is a mem- ber of the Scientific Advisory Board for the Journal of Endodontics (AAE) and maintains a private referral practice for endodontics, implantology, etc at 20 Wimpole Street, W1G 9GF London (www.msdentistry.co.uk).