

# **SHARPENING PERIODONTAL INSTRUMENTS**

**Adele Kendler, Dental Hygienist, London UK**

An increasing elderly population gives rise to more people keeping their teeth which in turn increases the number of people suffering with some form of periodontal disease. In fact current statistics show that about 75% of the public in the U.K. will have some disease at some time. Also awareness has increased and patients' not only want to retain their teeth, but they want to be offered a good standard of care. It is the responsibility of the profession to make sure that all necessary periodontal treatment is carried out, whether it is a scale and polish with the hygienist or more extensive treatment by the hygienist, dentist or periodontist.

We must therefore consider what are the most important factors when we carry out this form of treatment.

Naturally we want to carry out pain free treatment in a relaxed and pleasant atmosphere in order that our patients will return in the future, but we also have to consider that the operator is able to carry out procedures in a way that is comfortable for them. This of course means that equipment needs to be in good working order, instruments regularly sharpened and maintained, and that we are seated comfortably. In addition, we have to be cost effective in order to maintain our standards and to continue running a profitable practice.

Sharpening of scaling instruments is certainly one of the factors that we should perhaps consider more frequently.

From my own personal experience I have to admit that the regular sharpening of periodontal instruments is often overlooked. This of course means that there are times when I am working with quite blunt instruments. As we know the patient can of course experience more pain during their treatment when the instruments have not been sharpened effectively. In addition, I have found myself experiencing symptoms such as sore hands and wrists. Repetition of movement

without recovery time is carried out during periodontal treatment and unfortunately this can result in certain health hazards, such as carpal tunnel syndrome and repetitive strain injury. A cure for these conditions is not always very successful leaving the practitioner seeking an alternative career.

Regular sharpening of periodontal instruments reduces the number of movements required when scaling. As I have already mentioned, we know it is often very difficult to find time to sharpen instruments easily during a busy working schedule, but to do it well and effectively is a completely different matter.

My past experience of trying to sharpen instruments manually, have unfortunately never produced good consistent results. Perhaps I have not had the good fortune to find the right kind of sharpening stones, but I found myself constantly replacing my instruments as I had somehow managed to remove too much metal or produce incorrect angles that could not be rectified. Unfortunately if incorrect angles are produced the chances are, that particular instrument, cannot be used again for the same function. Frequent replacement of scaling instruments, therefore becomes extremely expensive and time consuming.

I recently had the good fortune of trying the PerioStar® 3000 periodontal instrument-sharpening machine. I was very pleased that this particular product not only sharpened my instruments mechanically and found the correct angle, but also has a unique mode of action allowing for effective, fast and simple sharpening of scaling instruments. As with hand-sharpening, my previous experience of sharpening machines had also, not given me the required results. This sharpening procedure does not have to be carried out by the professional as other members of the team can perform this task, thus increasing the time that can be spent more profitably with the patient. The PerioStar® 3000 works in the following way; the locking and sharpening positions are pre-determined for specific instruments. I

found that the only thing I needed to understand in order to use this piece of equipment was how to align and seat the instrument and which positions to set for a specific type of instrument. Once the instrument is seated you just have to turn a handle and the correct angle is automatically selected for that particular instrument. The instrument is then clamped into position. For example, position 1 is for a universal scaler and position 2 is for a curette. Gracey curettes have a separate position. I found that this distinguishing feature, not only made it easy to use, but I was able to sharpen the instruments extremely quickly and effectively. Personally I found that sharpening one instrument only took a few seconds, as the grinding stone rotates against the blade. First one side of the blade and then the other is sharpened. Sharpness can be tested on an acrylic-testing rod, which is supplied.

A video with clear and concise operating instructions on the use of the Periostar<sup>®</sup> 3000 is also included. It is manufactured by KerrHawe, Switzerland and can be purchased from your preferred materials supplier. I understand that the company can arrange in-surgery demonstrations to enable you to see and experience the benefits of this piece of equipment.

The Periostar<sup>®</sup> 3000 should not only be considered for its efficiency, effectiveness, and ease of use, but in addition when looking at the cost implications of running a dental practice, it is important to remember the following; greater length of life for our instruments result in less time spent in ordering and selecting replacements, enabling us to spend more time with our patients. Sharpening time with this quality machine is minimal and can be carried out by other members of the dental team, thus not interrupting valuable surgery time. Finally, elimination of lost working hours due to health hazards such as carpal tunnel syndrome and repetitive strain injury will almost certainly be avoided. I feel that this machine will prove to be an invaluable tool to any dental practice.