**EVOLUTION OF THE DENTAL HYGIENIST**

“Why is dental hygiene changing?”

Periodontal medicine, an innovative and budding division of health care, is bridging the gap between dentistry and medicine. The cover of February 23, 2004 TIME magazine titled, “The Silent Killer…The surprising link between Inflammation and Heart Attacks, Cancer, Alzheimer’s and other diseases” has sparked attention of both dental practitioners and patients alike. Clinicians are becoming more research driven, as traditional methods are dissolving into evidence based pathways.

**CLINICAL PROCEDURES**

“What do hygienists do anyway?”

Hygienists perform a number of procedures from supra-gingival (above the gum line) scaling and application of course polishing pastes, sub-gingival (below the gum line) scaling, to more complicated periodontal procedures including quadrant scaling with anesthesia, full mouth disinfection and placement of locally applied antimicrobials. Research has established the use of ultrasonics as being as effective as hand scaling, giving ultrasonic technology a key role in contemporary periodontal therapeutics. Proper use of ultrasonics also aids the conscientious hygienist by preserving the fluoride rich layer of enamel that polishing pastes have been known to remove.

**ULTRASONICS VS. HAND SCALING**

“I am happy with the results I get from hand scaling with my instruments. Why should I use any ultrasonic scaler?”

There are many reasons hygienists should employ ultrasonics. In addition to (or in place of) hand instruments, the lavage promotes excellent healing benefits and debris removal while decreasing operator fatigue and increasing efficiency. Ultrasonic tongue disinfection removes volatile sulfur compounds (the bacteria responsible for most bad breath) by “sweeping” the tongue with the back of the tip. Acoustic streaming provides the benefit of breaking up the biofilm beyond the reach of the tip as well as providing access to difficult areas.

**MAGNETOSTRICTIVE VS. PIEZO**

“What are the benefits of a piezoelectric device?”

During most of my two-decade career, I have used magnetostrictive ultrasonics. In comparison to other devices, piezoelectric are quieter and require less water. Thinner, probe-like tips provide easy access with less tissue trauma. The light weight hand piece and ergonomic cord reduces the chance for operator injury, prolonging the longevity of a hygienist’s career. Tactile sensitivity is enhanced, allowing better deposit removal. Patient comfort, due to the linear tip movement, greatly reduces (if not eliminates) need for anesthesia in periodontal therapy cases. Piezoelectric ultrasonic technology offers low power settings which enable clinicians to use the thinnest tips; with uses ranging from routine preventative care to severe periodontal cases. Another feature piezoelectric ultrasonics boast is the decreased amount of water compared to magnetostrictive, as well as less generated heat, which is appreciated by both patients and practitioners alike. Increased practice revenue is also realized by creating potential for incorporation of the periodontal therapist model, which permits qualified hygienists to practice at an advanced level. Daily production transforms from $600—$800, to surpassing $2,500 in an average eight hour day.

**NEW FROM ACTEON**

ACTEON’s P5 Newton XS™ LED offers several benefits. It offers easy portability, complementing its light weight and compact design. Although thinner inserts for magnetostrictive units are now available, there is no comparison to the selection and design that SATELEC offers. The 300 ml irrigation tank allows use of water or chlorhexidine. This is a great feature for practices where space is an issue, where the unit will be shared between operatories, or if there are no quick water connections available. It is also ideal for hygienists that are employed as subcontractors or temps, traveling to multiple practices. Also, the available autoclavable LED lights in the handpiece provide a bright, white light for superior visibility when working with loupes.

Colleen Rutledge is a hygiene coach, writer and well-respected dental hygienist who speaks nationally on the non-surgical approach to managing periodontal disease. Her professional career began over 30 years ago in Philadelphia after completing a dental assisting externship at Temple University and graduating class president from National School of Health Technology. She pursued a degree in Dental Hygiene at Coastal Carolina Community College in North Carolina and was the recipient of the Golden Scaler Award. For more information or questions, e-mail Colleen at colleen@perioandbeyond.com.