“MAGICAL MINUTES” GAINED WITH AIR POLISHING

WHAT’S THE RETURN ON INVESTMENT?

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Dental Hygienist around the world share a common habit…monitoring the clock. How can we increase efficiency without sacrificing clinical effectiveness? Biofilm management with air polishing devices and low-abrasive powder has been shown to be significantly more efficient and more comfortable than biofilm removal with hand and ultrasonic instruments. Let’s take a closer look at the benefits.

Biofilm covers the surfaces of the teeth and all of the tight, narrow periodontal pockets. It is sticky and adherent and requires mechanical disruption to remove it. While power ultrasonic tips and site-specific hand instruments are ideal to remove calcified deposits, removal of sticky biofilm requires numerous overlapping and repetitive strokes. But by using air polishing devices that combine the synergy of air, water, and fine powder, biofilm can be lifted off with just 5 seconds of exposure. It is kind to the tissue, enamel and root surfaces, porcelain and composite restorations, and even implants and implant abutments.

Multiple studies have found that while hand instrumentation of subgingival biofilm removal in deep pockets can take between 30-64 seconds, air polishing with glycine powder has repeatedly been found to take only 5 seconds[1,2]. Comparable clinical results were achieved in these studies, but patients consistently favored air polishing from a comfort standpoint. And, seriously…biofilm removal in 5 seconds per pocket! This is exactly what I have experienced clinically since shifting to this technology.

Since not all air polishing devices on the market are suited for low-abrasive powders, clinicians desiring to efficiently manage biofilm with subgingival air polishing would likely find themselves investing in devices that give clinicians freedom to use low-abrasive powders such as the Hu-Friedy EMS Air Flow® Handy or the Air Flow® Master Piezon.

While it would be compelling to reference a double-blind, placebo-controlled study confirming a specific dollar amount as a return-on-investment, that study does not exist. So instead, I will share real-world experiences. First, let’s appreciate that biofilm management with low-abrasive powder requires a different approach. Since low-abrasive powders and air polishing devices are so efficient in biofilm removal, clinicians can begin with use of that technology, finishing up with use of power and hand instruments to remove calcified deposits and remaining stains. Rubber cup polishing is not required. This simple transition of going after the biofilm first with the most efficient technology saves about 10 minutes of instrumentation time per patient.

The most obvious use of those magical minutes could easily be to couple them together to see one more patient per day, per dental hygienist, but I have experienced and observed a very different return-on-investment. Within the allotted time per patient on the schedule, having an extra 8 to 12 minutes due to efficient biofilm management with air polishing gives the clinician freedom to be more comprehensive in his or her services.

For example, how many dental hygienists have intra-oral technology that goes unused due to time constraints? When is the last time you sat the patient upright and performed a shade guide analysis to discuss the options of veneers versus whitening or Invisalign? What percentage of your adult patients today have comprehensive periodontal charts that have been updated within the past 12 months including recession, bleeding and furcation involvements? What if you had time to walk a patient with pending treatment through the benefits of not waiting until symptoms manifest? What if you had time to take impressions for whitening, or collect comprehensive periodontal data leading to early diagnosis and treatment of periodontal disease, or play an educational video explaining the benefits of implants for missing teeth, or provide varnish, sealants and desensitizers to better manage caries risk? These and many other comprehensive and billable services can be provided, per patient, without running behind when you start your appointment by managing biofilm first with air polishing devices. What is this real return-on-investment?

- Happy patients because the process is more comfortable and more efficient.
- Happy clinicians because they finally have more T-I-M-E per visit to perform services that have been elusive
- Increased profitability as a result of increased services and treatment enrollment by the dental hygienist

Sound too good to be true? Try it yourself, and experience the return-on-investment possibilities with your own magical minutes.

[1]Wenstrom JL, Dahlen G, Ramberg P. Subgingival debridement of periodontal pockets by air polishing in comparison with ultrasonic instrumentation during maintenance therapy. Journal of Clinical Periodontology 2011; 38:820-827.

[2]Moene R, Decaillet F, Andersen E, Mombelli A. Subgingival plaque removal using a new air polishing device. Journal of Periodontology 2010; 81:79-88.