

THE DENTAL ADVISORTM

Improving Patient Care Through Research & Education



Photo by Allan Munsie

Sleep Medicine and Dentistry

Obstructive sleep apnea (OSA) is a problem which is gaining recognition as one of the most common and under diagnosed chronic diseases. As dental professionals, we have the opportunity and the obligation to understand how this disease affects our patients from both a dental and medical perspective. And regardless of the decision that dentists make to get involved in the treatment of OSA, it is necessary to be able to recognize the signs and symptoms of this disease for treatment or referral, as well as to understand how it affects our practice of dentistry.

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RATINGS:

Excellent + + + + +

Very Good + + + +

Good + + +

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From the Desk of Dr. Paul Chaiken, Guest Editor



I first became interested in the field of sleep apnea, or sleep disordered breathing, because I have seen the effects of bruxism in my practice and wanted to help my patients in a more significant way than just making occlusal splints to manage their bruxism. My research into sleep bruxism lead me into the field of sleep disordered breathing.

To get involved this treatment, continuing education is a must. There are many opportunities to obtain this education, but be cautious of programs that are connected to high priced diagnostic or therapeutic items to purchase. The best programs are non-biased and not commercial. The American Academy of Dental Sleep Medicine offers some good introductory courses, as well as an annual meeting. Dr. James Metz from Columbus, Ohio and Dr. Jeffrey Rouse from San Antonio Texas are also excellent references for continuing your education in this area.

Getting involved with local sleep medicine physicians is an important part of developing your practice and treatment protocols. Specifically, neurologists, pulmonologists, and sleep medicine specialists will be needed to collaborate treatment and for definitive diagnostic services.

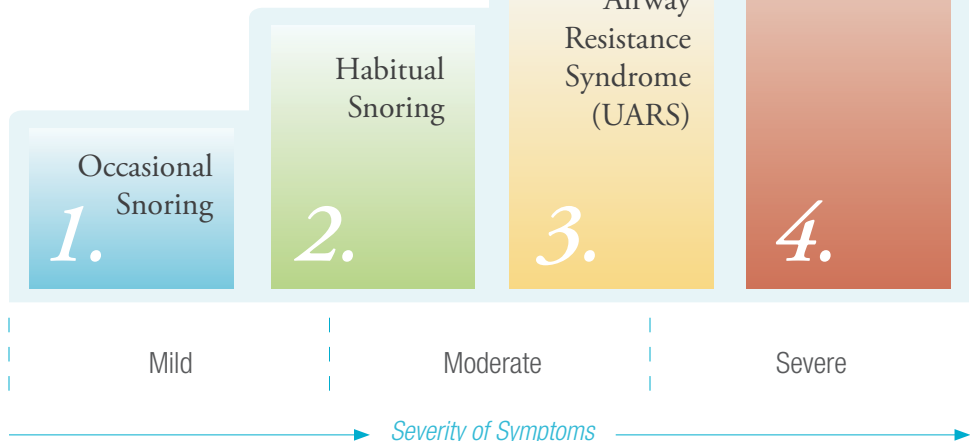
In my personal practice, I have found a great assessment team to first diagnose the patient and collaboratively treat through a multitude of options. I am continually surprised at how medicine and dentistry have not intertwined more closely. This is a critical step in treating cases successfully.

I lecture nationwide on this topic and am pleased to share my experience with others. If you have further questions or need clarification on any aspect of treating sleep disorders in your practice, feel free to contact me at drchaiken@aol.com. As always, thanks for reading THE DENTAL ADVISOR!

Sleep Medicine and Dentistry

Sleep apnea is a dangerous sleep disorder that happens when a patient's breathing is interrupted during sleep. It is common in both medical and dental practices, and it presents a serious threat to a patient's health. Sleep apnea is actually part of a series of events which is best described as "sleep disordered breathing."

Stages of Sleep Disordered Breathing



Sleep Disordered Breathing

On a continuum, sleep disordered breathing starts out as occasional snoring. Snoring occurs as a sound caused by air turbulence inducing vibration of the pharyngeal tissues during sleep. Several factors are responsible for this collapse of the pharyngeal airway, including the use of sedatives or drinking alcohol, as well as obesity. Snoring is a problem for the patient as it significantly increases the risk of carotid artery atherosclerosis. Vibrations from snoring get transmitted to the carotid artery, and the amount of plaque accumulation increases as snoring intensity increases. Snoring is also a social problem and has an impact on the bed partner of the snorer, and this affects relationships. According to a study at the Mayo Clinic, bed partners woke up at least partially on average of 21 times per hour while the snorers were awakened 27 times per hour. This “second hand snoring” causes marital problems and sexual dysfunction. Snoring is reported in 40% of men and 24% of women, and it is likely to increase due to the current epidemic of obesity in the United States.

Along the continuum of sleep disordered breathing, the occasional snorer becomes a habitual snorer, and this can lead to the next recognized category known as upper airway resistance syndrome or UARS. UARS is an increased respiratory effort required due to the narrowing of the pharynx during sleep, like snoring, but oxygen levels do not desaturate below 4% like in sleep apnea. As an intermediate form of sleep disordered breathing between snoring and sleep apnea, patients experience headache, gastro esophageal reflux disease (GERD), depression, anxiety, bruxism, and temporo mandibular dysfunction (TMD). These patients are mostly younger and more often females. They are commonly misdiagnosed as having chronic fatigue syndrome and fibromyalgia.

The last entry on the continuum of sleep disordered breathing is sleep apnea. The two main types of sleep apnea include central sleep apnea and obstructive sleep apnea. Central sleep apnea occurs due to medical or neurological complications when the brain does not send signals to the muscles responsible for controlling breathing. The more common form is obstructive sleep apnea (OSA) which occurs when the tongue and throat muscles relax during sleep causing a blockage of the airway. These apnea events, where breathing is stopped for 10 seconds or longer, can occur as often as 100 times per hour. A blocked airway means reduced oxygen going to vital tissues and organs.

Apnea-Hypopnea Index (AHI)



Apnea: a decrease in airflow of greater than 50% for more than 10 seconds, 5 or more times per hour of sleep with a decrease of oxygen saturation exceeding 4%.

Hypopnea: a decrease of air flow by 30% with oxygen desaturation of more than 3%.

<i>Mild</i>	<i>Moderate</i>	<i>Severe</i>
5-15 times per hour	16-30 times per hour	More than 30 times per hour

Once the patient falls asleep and the muscles relax, the airway collapses, airflow is blocked to the lungs with the reduction of oxygen to supply the body and brain. The obstruction persists until the brain partially awakes the patient to re-open the airway, called a micro arousal. The micro arousal can be unconscious so the patient is unaware of its occurrence, but this cycle repeats itself several times per hour in sleep apnea and the patient cannot get a restful night of sleep. These patients have excessive daytime sleepiness, which affects neurocognitive functioning during the day and is responsible for increased risk for injury, decreased work or school performance, and is known to be responsible for motor vehicle accidents. In fact, it has been reported that over 40% of commercial vehicle accidents are due to driver sleepiness. Additionally, there is a list of medical conditions listed as comorbidities, or consequences of OSA. These include systemic hypertension, obesity, atrial fibrillation, congestive heart failure, diabetes, coronary artery disease, stroke, and sudden nocturnal death.

Risk factors for developing sleep apnea include:

- Male over 40 years of age
- Overweight
- Large neck size over 17 inches for males; 16 inches for females
- Hypertension
- Retrognathia (commonly called overbite)
- Micrognathia (abnormally small jaw)
- Enlarged tongue or tonsils

As we have a better understanding of the etiology and pathophysiology of OSA, it becomes clear that although dental professionals must be able to recognize the signs and symptoms of OSA, it is primarily a medical condition which requires a diagnosis by a sleep medicine physician. A diagnosis is made by physical examination of presence of risk factors, as well as evaluation of the oral-pharyngeal space called the Mallampati classification. In addition to the physical exam, a careful history is needed. This often includes a survey called the Epworth Sleepiness Scale. The gold standard for diagnosis, however, is the overnight sleep study called polysomnography which measures several physiologic activities during sleep. A sleep medicine physician uses this test to measure air flow, blood oxygen level, breathing patterns, muscle activity, pulse rate, blood oxygen levels, and brain activity (EEG).

Once the sleep study (PSG) is completed and the apnea hypopnea index (AHI) is scored, treatment options should be considered. Many sleep medicine physicians prefer to recommend the continuous positive airway pressure device (CPAP) to treat OSA. Considered the “gold standard” for treatment, especially for severe OSA, the CPAP opens the airway through air pressure delivered as the patient wears a mask that fits over the nose and mouth and is connected to an air compressor. There are various types of CPAP machines and masks, and they are well researched and highly effective in treating OSA. The main problem with CPAP therapy is patient compliance. The mask and tubing can be uncomfortable; it can cause dryness and nasal congestion, and may not be tolerated by some patients due to claustrophobia. Various studies have measured CPAP compliance by patients as less than 50% for nightly use, and that 60 to 70% of patients do not wear it after one year. In recognition of the problems with CPAP usage, more physicians, patients, and dentists have become familiar with oral appliance therapy. Dental appliances are a valid option for patients who cannot tolerate a CPAP.

Treatment options for OSA include:

1. **Behavioral interventions:** avoidance of alcohol and sedatives or narcotics, smoking cessation, weight reduction, and avoiding supine sleep positions.
2. **Medical interventions:** CPAP, or continuous positive airway pressure.
3. **Surgical interventions:** tonsillectomy and adenoidectomy, uvulopalatopharyngoplasty (UPPP), and maxillo-mandibular advancement.
4. **Dental interventions:** oral appliance therapy.



Evaluation and Treatment in the Dental Practice

In order for a dentist to get involved in the treatment of sleep disordered breathing patients, the first requirement should be obtaining sufficient education about this disease through available training. The American Academy of Dental Sleep Medicine (AADSMD.org) is an excellent resource for non-biased education. Many industry sponsored training opportunities also exist.

Dental evaluation of the patient who presents with sleep disordered breathing starts with a history and physical exam. This includes a dental exam, occlusal classification, periodontal and TMJ evaluation. The oropharyngeal tissues are noted by size of the tongue, soft palate, uvula, and tonsils. Cephalometric radiographs are taken to measure posterior airway space. Cone beam CT and MRI scans can also be used for this examination. The dental evaluation for treatment of OSA must be supplemented by a diagnosis by a sleep medicine physician.

How Dental Sleep Appliances Work

Oral appliance therapy mostly involves mandibular advancement to open the airway. There are many variations of design of these mandibular repositioning devices (MRDs). They attach to both the upper and lower jaw and are adjustable to the amount of advancement needed for therapeutic effect. Some of the more popular types of appliances used are the **Thornton Adjustable Positioner (TAP)** (*Airway Management*), **Somnomed** (*Somnomed*), **Herbst** (*Dentaurum*), and **EMA** (*Myerson*). Accurate impressions are needed as well as a bite registration of the correct jaw position. The **George Gauge** (*Great Lakes Orthodontics*) is an instrument used to determine and record the optimal amount of mandibular protrusion. Individual patient anatomy, sleep position, and preferences help determine the appropriate appliance.

Informed consent is recommended prior to the appliance therapy due to the potential for adverse effects in some patients. These may include occlusal changes, tooth position changes, and TMJ discomfort. These complications are generally minor and temporary in nature.

Following a period of time wearing the repositioning appliance, the patient returns to the dental office for evaluation of their symptoms. A follow up Epworth Sleepiness Scale is helpful to compare before and after results. Objective data can also be measured using a pulse oximeter or a home sleep test. Examples of home sleep tests which may be used by dentists for this purpose are the Apnea Link, ARES, and the Itamar Watch-PAT. This information can then be used to adjust or titrate the amount of mandibular protrusion to increase the airway space. In many cases a follow up polysomnogram (PSG) is done to provide definitive diagnostics.

Factors to Consider When Treating Sleep Disorders in Your Practice

Obstructive sleep apnea is a medical disease which must be diagnosed by a physician. The dentist, however, plays a critical role in the identification of these patients. In addition to the oral findings commonly found in these patients, one of the most common findings in dental practices is tooth wear. The etiology of tooth wear is multi-factorial; however, it is commonly caused by grinding and clenching of the teeth. When this activity occurs during sleep, we call this sleep bruxism. It is commonly thought that bruxism is related to occlusion, but this has not been proven. What is known is that airway obstruction stimulates a patient to clench or grind unconsciously to open the airway. These sleep bruxism episodes, while causing tooth wear and fracture of dental restorations, are also responsible for an increase in respiratory ventilation. In short, bruxism protects the airway, and this is a pattern seen in both adults and children with sleep disordered breathing. The use of occlusal splints, or night guards, is often recommended for patients who present with tooth wear. In the case of a centric relation splint, this may position the mandible in a way that aggravates the respiratory disturbance. Therefore, patients should be evaluated for OSA prior to using an occlusal splint.

Another cause of tooth wear seen in the dental practice is erosive in nature, caused by gastro esophageal reflux disorder (GERD). Studies have shown that an increase in intrathoracic pressure found in patients with SDB allow the acid content of the stomach to reach the oral cavity. The palatal surface of maxillary molars is the most common area for damage, but this is also dependent on the position that the patient sleeps in during these episodes. Dr. Jeffrey Rouse is a prosthodontist who has written about the connection between sleep bruxism, sleep disturbance, and sleep related GERD, which he calls the "Bruxism Triad."

Regardless of how you plan to treat sleep disorders in your practice, it is critical to first educate yourself on available methods, meet with physicians who are treating sleep disorders, and set a diagnostic and treatment protocol specific to your patient. The integration of medical conditions with dental health and treatment is no longer a new concept. Patients will respond positively to a multidisciplinary approach and collaboration between physicians and dentists.

About the Author: Paul J. Chaiken, DDS



Paul J. Chaiken, DDS is currently in private practice of restorative dentistry and dental sleep medicine in Chicago, Illinois. He is an assistant clinical professor at Northwestern University, Feinberg School of Medicine and on the medical staff of Northwestern Memorial Hospital in Chicago. Dr. Chaiken attended Indiana University in Bloomington and received his dental degree from Loyola University in Chicago. He has served as the program chairman of the Chicago Academy of Interdisciplinary Dentofacial Therapy, on the peer review board for the Chicago Dental Society, and as a faculty member for Spear Education at the Scottsdale Center for Dentistry.

Dr. Chaiken has received fellowships from the American College of Dentists and the Academy of General Dentistry, and is currently a clinical consultant for THE DENTAL ADVISOR. He is a member of the American Dental Association, Chicago Dental Society, Chicago Academy of Interdisciplinary Dentofacial Therapy, and the American Academy of Dental Sleep Medicine.

PRO-SYS® Tapered Toothbrush

Benco Dental
www.benco.com

Description

The **PRO-SYS® Tapered Toothbrush** includes DuPont Tynex tapered filaments arranged in a multi-level design. This design is intended to clean deeper in difficult-to-reach areas without sacrificing comfort. The handle is rubber-free for a cleaner surface. For every toothbrush sold, one is donated to someone in need. **PRO-SYS Tapered Toothbrush** is available in three sizes in a variety of colors, and custom imprinting is available. **PRO-SYS Tapered Toothbrush** was evaluated by 32 dental professionals during a two-month period. This toothbrush earned an 86% clinical rating.

Suggested Retail Cost	
Dozen Compact – 33 Tuft	\$6.49
Dozen Full – 38 Tuft	\$6.79
Dozen Junior – 27 Tuft	\$6.29

Clinical Observations

Cleaning ability

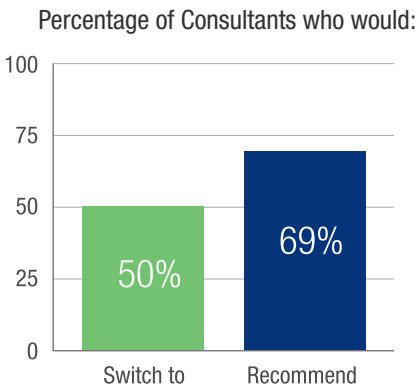
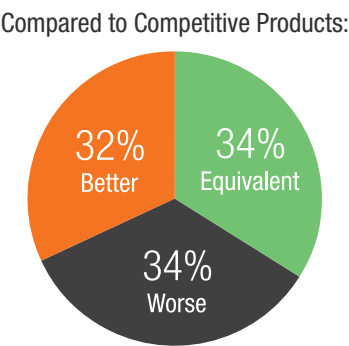
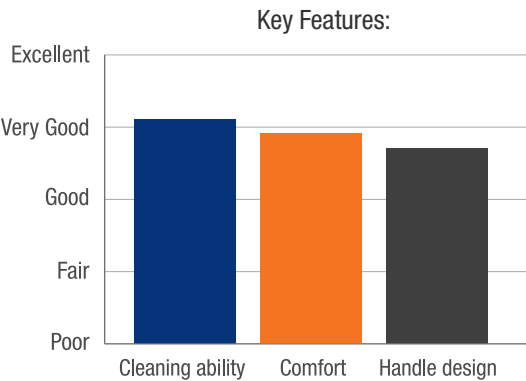
The longer, tapered bristles were rated highly for sweeping below the gum line for thorough cleaning. The multi-level design allowed the bristles to spread across the tooth surface with gentle pressure. Some users found the brush head to be too narrow and suggested an additional row or two of bristles to increase the surface area for improved effectiveness. The square brush tip was blunt, rather than tapered and inhibited access to upper molars in small mouths.

Comfort

The comfort of any particular toothbrush is a personal preference. Many consultants found **PRO-SYS Tapered Toothbrush** to be gentle yet effective, leaving their teeth feeling very clean. Others rated comfort lower, commenting that the brush overall was stiffer than they would like.

Handle design

The hard plastic of the handle was smooth and easy to clean. Unlike brushes that incorporate a rubberized material into the handle, toothpaste residue was easy to rinse away and did not build up. The square geometry of the handle provided a gripping surface but did not fully prevent the brush from slipping in the hand.



++ ++



Consultants' Comments

"It cleaned better than other manual brushes that I've used."

"I love the donation concept."

"The brush lays flat on a surface without rolling."

"I really loved the softness of the tapered bristles and the deep-clean feeling it left behind."

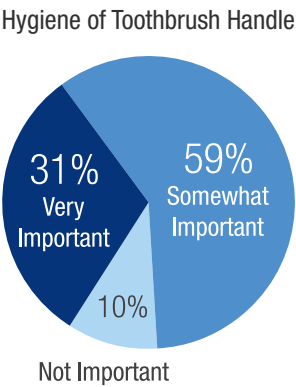
"It could be very effective for ortho patients."

"A textured handle would be easier to grip."

Charitable Program
Twenty-nine percent of consultants said that a charitable giving program influences their decision to purchase a product, including the **PRO-SYS Tapered Toothbrush**. ■

Editors' Note

A new wide head will be available as an option.



Tetric EvoCeram Bulk Fill

Ivoclar Vivadent, Inc.

(800) 533-6825 | www.ivoclarvivadent.us

Description

Tetric EvoCeram Bulk Fill is a nano-hybrid composite indicated for direct restorations in posterior teeth. This radiopaque composite contains patented pre-polymers that reduce shrinkage stress; Ivocerin, a photo-initiator that results in a deeper depth of cure; and light sensitivity filters for extended working time. The composite is filled 53-54% by volume with particles in the 40-3000 nm range. **Tetric EvoCeram Bulk Fill** cures in 10 seconds and can be placed in layers up to 4 mm.

Clinical Evaluation Protocol

Over a two-year period, more than 130 **Tetric EvoCeram Bulk Fill** restorations were placed and monitored. At two years 100 restorations were recalled, including one- to four-surface posterior restorations (Figure 1).

The recalled restorations were evaluated in the following areas: esthetics, resistance to fracture/chipping, resistance to marginal discoloration, wear resistance, and lack of postoperative sensitivity. Restorations were evaluated on a scale of 1-5 with 1 = poor, 2 = fair, 3 = good, 4 = very good, and 5 = excellent.

Clinical Observations

Esthetics

98% of recalled **Tetric EvoCeram Bulk Fill** restorations exhibited excellent esthetics (Figure 2). Although the composite material is slightly translucent, this was not an issue when the tooth was not originally discolored. Place an opaque flowable composite if the tooth is discolored.

Resistance to Fracture/Chipping

Resistance to fracture/chipping was rated excellent (Figure 2). Five restorations were replaced over the two-year period. In one case the root fractured, necessitating the extraction of the tooth. The fracture was unrelated to the composite material. The four remaining teeth had very large restorations, two of which were cores. All four were crowned with ceramic restorations. No chipping was noted on any of the remaining restorations.

Resistance to Marginal Discoloration

Resistance to marginal discoloration was rated excellent (Figure 2). Four restorations that exhibited superficial staining at the cavosurface margin were re-polished with excellent results.

Wear Resistance

Wear resistance was rated excellent (Figure 2). None of the recalled restorations exhibited any wear of the composite or the opposing dentition.

Lack of Postoperative Sensitivity

All restorations were bonded with self-etching bonding agents. None of the patients reported any postoperative sensitivity (Figure 2). The products patented technology that reduces polymerization shrinkage may have contributed to the lack of postoperative sensitivity.

Conclusions

Tetric EvoCeram Bulk Fill performed extremely well at two years. The clinical outcomes of this two-year evaluation of 100 restorations were exceptional. **Tetric EvoCeram Bulk Fill** received a 99% clinical performance rating. ■

2-year Clinical Performance

+++++

Consultants' Comments

"The esthetics was exceptional in non-discolored teeth."

"I used an opaque composite or flowable to tone down any discoloration with good results."

"I love the ease of placement of their composite – it is not sticky and contours well."

"The surface polish at 2 years was excellent – looked like a mirror."

"In many cases I could not even see the filling – it blended so well with the tooth."

FIGURE 1

Distribution of Recalled **Tetric EvoCeram Bulk Fill** restorations.

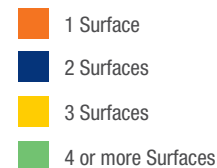
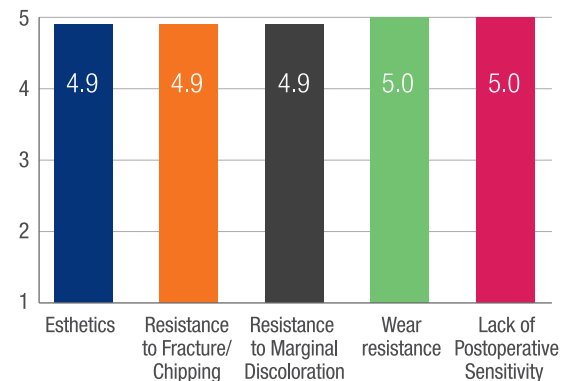


FIGURE 2 Results of **Tetric EvoCeram Bulk Fill** at 2 Years.



Sterling S495

Benco Dental
www.benco.com

Description

The **Sterling S495** is fiber-optic, air-driven handpiece, designed with a small head for improved access and visibility. The handpiece incorporates double impeller technology for improved precision and stability and 20 Watts of power. A quick stop brake system with a rubber brake ring engages with the turbine axis, decreasing brake time significantly. A unique rotor design with 36 blades maintains high power and constant torque. The **Sterling S495** is available in three attachment designs to fit common couplers. The K-style fits *Kavo multiflex lux* couplers; NK-style fits *NSK* couplers; WH-style fits the *W&H Roto Quick* coupler. **Sterling S495** was evaluated during a two-month period in over 100 uses. This high-speed handpiece received a 95% clinical rating.

Suggested Retail Cost \$1,065.00/per unit

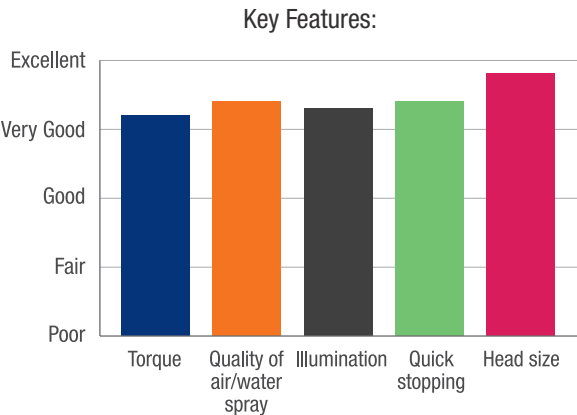
Equipment Features

Sterling S495 offers the combination of a small head size with powerful cutting ability. The access and visibility attributed to the small head make it a versatile handpiece for use in any situation. While some consultants found the torque to be lower than other, larger handpieces, it did not diminish their ability to complete procedures. The quick braking was superior to most other handpieces they had used. The versatility of three styles allows users to easily attach **Sterling S495** to their existing couplers. ■

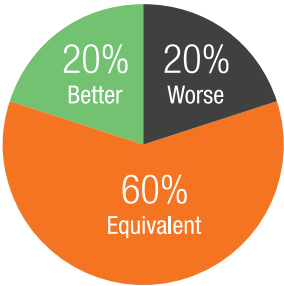
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Consultants' Comments

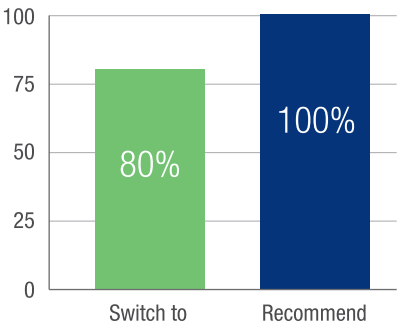
- "Very powerful for a small head."
- "Good handpiece for the price, and the two-year warranty is great."
- "Performs better than my Kavo."
- "Bright illumination."
- "Great access in tight spaces."
- "A little louder than my other handpieces."



Compared to Competitive Products:



Percentage of Consultants who would:



1shot SUB Series + + + +

1Shot SUB Series is a dental x-ray film and sensor holder system. Recent changes to the system hold the sensor/film more securely in place. The medical-grade silicone bands are now thicker for added retention. Bands also have a handle integrated at one end to aid in stretching it in place. The addition of the handle improves the user's ability to secure the band over the sensor/plate, especially with gloved fingers that can limit gripping ability.

The system is designed to fit all film, phosphor plates and digital sensors in all sizes. Holders are color-coded plastic and include styles for bitewing, anterior/posterior periapicals, and anterior/posterior endodontic radiographs. All x-ray holders and silicone universal bands are reusable and autoclavable.

1shot Dental
+64 7-827-6021 | www.1shotdental.com



Mojave Dry Vacuum System

Air Techniques

www.airtechniques.com

Description

The **Mojave Dry Vacuum System** utilizes a single-stage regeneration pump driven by a variable frequency drive. The **Mojave** requires no oil or water and is designed to deliver exceptional flow rates and energy cost savings. The compact unit speeds up or slows down based on the suction needs of the office. The **Mojave Dry Vacuum System** is low maintenance as it has an automatic rinsing cycle to clean the tank and prevent clogs. It is available in six different models. A master controller is required for every system and can control up to 4 pumps to alternate the primary pump and regulate the speeds of multiple pumps as well as consistently monitor, record and report any system errors found. Mojave Dry Vacuum units perform automated self-diagnostic tests every 4 hours on each pump. Each system comes with a two-year warranty for the complete unit and an extended warranty is available. Five consultants evaluated **Mojave Dry Vacuum System** during a six-month period. This vacuum system received a 98% clinical rating.

Suggested Retail Cost

\$12,495/Mojave V5

Equipment Features

Mojave Dry Vacuum System provided consistent suction throughout the workday. As additional users come online, the variable frequency drive increases, maintaining suction. Users reported it to be virtually maintenance free. The fact that it worked without having to think about it was a relief to all of the dental staff members. The small footprint

+++++



Consultants' Comments

"So simple and reliable."

"There was no change in suction power, no matter how many operatories were in use."

"Saving water and electricity is a bonus."

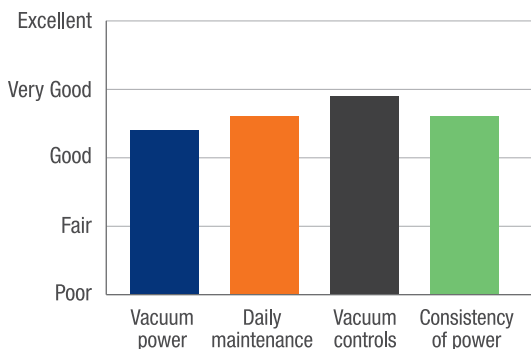
"System may be expanded if my practice grows."

requires less than six square feet of floor space. The control panel effectively displays function of the system; no errors were reported during this evaluation.

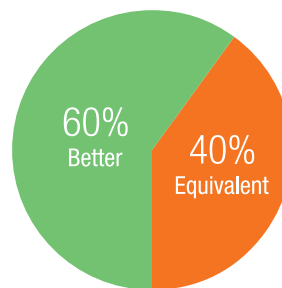
Clinical Tip

- Daily cleaning of suction lines with Monarch CleanStream is recommended. ■

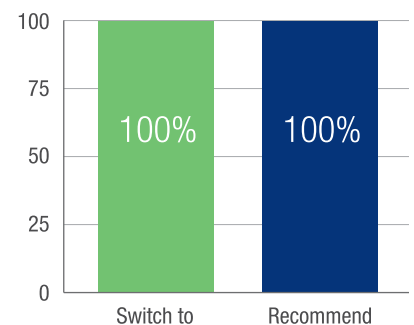
Key Features:



Compared to Competitive Products:



Percentage of Consultants who would:



MTA-Angelus Reparative Cement + + + + 1/2

Angelus
1-855-FindMTA, 1-855-346 3682 | www.angelusdental.com

MTA-Angelus Reparative Cement is an endodontic reparative cement containing mineral trioxide aggregate (MTA). A new, smaller packaging option includes a single 1 g vial of powder. Fifty percent of consultants preferred this to the original 5 x 1 g packaging. **MTA-Angelus** is indicated for the treatment of lateral and furcation perforations, apexification, internal resorption, pulpotomy, pulp capping, and apexogenesis. The powder is packaged in a re-sealable vial; liquid (distilled water) is in a dropper bottle. **MTA-Angelus** is available with white powder or a new light gray color.



ALL-IN-ONE FEDERAL OSHA/GHS & HIPAA/ Omnibus Rules Training & Compliance Package

Dental Enhancements

www.dentalenhancements.com

Description

The **ALL-IN-ONE FEDERAL OSHA/GHS & HIPAA/Omnibus Rules Training & Compliance Package** is a comprehensive program providing everything necessary to comply with Annual OSHA Employee Training & Certification, Global Harmonization System (GHS) requirements and HIPAA Omnibus Rule compliance. Included are newly updated OSHA & HIPAA Manuals; a training CD-ROM that provides a 45-minute GHS & HIPAA employee training videos plus all required electronic forms; Biomedical Waste & Hazardous Rating labels; two pictogram diagram; federal OSHA poster; and a 72-Point OSHA Safety Facility Report with safety recommendations instantly emailed to your dental office. Training includes a 90-minute interactive webinar for the entire team to complete required training and a 90-minute phone consultation with the office's key contact person to navigate through all materials. Necessary paperwork is organized in quick-reference binders. In case of an OSHA inspection, experts will be available to guide dentists through the process. One year of on-call support is included. Annual OSHA Employee Training & Certification renewal with program updates is available for a minimal cost. **ALL-IN-ONE FEDERAL OSHA/GHS & HIPAA/Omnibus Rules Training & Compliance Package** was evaluated by 13 consultants. This compliance program earned a 98% clinical rating.

Suggested Retail Cost \$1199.00/package

Observations

Overall Program

Dental Enhancements provided a concise, organized program that was customized for each dental office. OSHA and HIPAA rules are complex and change frequently, and this program not only tells offices what to do, but provides the materials and protocol checklists to ensure compliance with the federal regulations. Consultants reported that they were left with a sense of well-being that they were compliant and prepared in the event of an inspection.

Training

The 90-minute live webinar was presented to each dental office and served to fulfill all three Federal training requirements. An abundance of information was presented, which did not allow time for many questions or discussions. Rather, questions or clarifications were noted by the OSHA and HIPAA officers and resolved in private phone communications with Dental Enhancements.



Consultants' Comments

"I thought our office was compliant until this program made me aware of what I didn't know."

"ALL-IN-ONE FEDERAL OSHA & HIPAA Training & Compliance Package takes an overwhelming subject and makes it manageable."

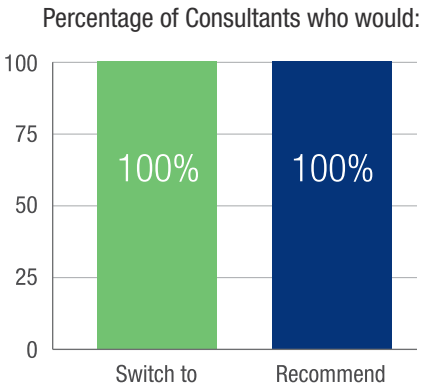
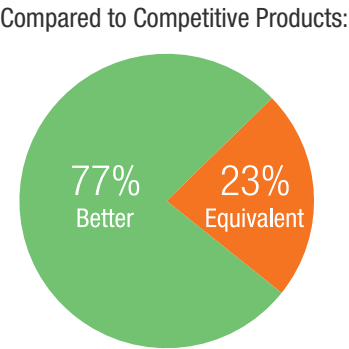
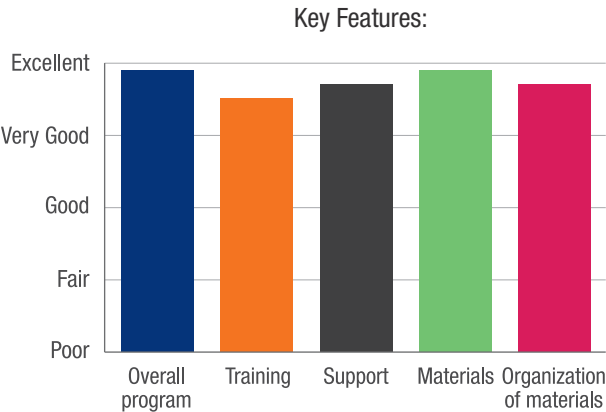
"It was very comprehensive. So much more intensive than any other OSHA or HIPAA training I have ever had. It was really great."

"We have signed up for the yearly updates."

"Webinar was fast paced. A lot of information to digest."

"There is some redundancy in the paperwork."

"Separate the webinar into two sessions, one for OSHA and one for HIPAA."



ALL-IN-ONE FEDERAL OSHA/GHS & HIPAA/Omnibus Rules Training & Compliance Package (cont.)

Support

The initial 90-minute phone call with Dental Enhancements was flexible in terms of time and varied depending on each office's needs. While 90 minutes was average, no limit was placed on this communication. Calls could be separated for offices that had different individuals who managed OSHA and HIPAA. Support was very methodical and individualized, walking dental personnel through the binders in order to complete forms and identify any needs unique to the dental practice. Follow-up calls were welcomed and were answered promptly.

Materials

Included in this compliance program are all forms and documents required to comply with OSHA/GHS and HIPAA regulations. Most useful were the office checklists for items necessary for compliance. The system even included adhesive labels for dental products and hazards. State-specific OSHA and HIPAA compliance was covered where required.

Organization of Materials

Materials were well organized in binders that kept required paperwork in one place. Four separate binders were included: OSHA Manual, Sterilization and Disinfection Log Organizer, SDS Organizer and HIPAA Manual. Each binder contained tabbed separators for quick access to the desired subject. Each section began with an outline summarizing the subject and the contents of the section.

Clinical Tips

- Be prepared to spend additional time updating MSDS forms to the new SDS standards of print and online availability.
- Use the included instructions for new Hazard Rating labeling requirements for dental products. ■

SplashMax

Den-Mat Holdings LLC

www.denmat.com

Description

SplashMax is a berry-scented VPS impression material featuring instant hydrophilicity, high tear strength, dimensional accuracy, and high-contrast colors. Its low contact angle, high tear strength, and 99.9% elastic recovery, results in highly detailed and accurate impressions.

SplashMax is available in four colors and viscosities, two set times, and two delivery systems. Regular- set material has a setting time of 4:30; Half-Time sets in 2:15. **SplashMax** heavy and lite viscosities in Regular Set and Half-Time Set were evaluated by 29 consultants in 447 uses. This impression material received a 91% clinical rating.

Suggested Retail Cost

\$40 /two 50ml cartridges

Product Features

The berry scent of **SplashMax** was a hit with patients and the dental staff. The handling properties were rated very good as long as users

+++ + 1/2

Consultants' Comments

"The berry scent and quick set make this a patient-friendly material."

"The Half-Time setting material is ideal for single units."

"Very accurate and detailed impressions."

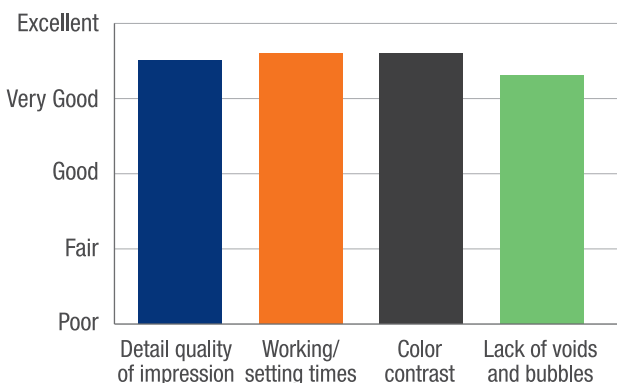
"Great handling and consistency."

"All crowns fit very well."

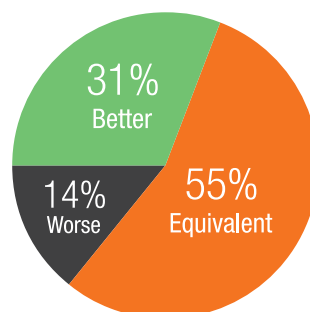
"Some cartridges seemed to have more air bubbles than others."

worked swiftly with the half-time set material. The heavy (purple) and lite (green) had good color contrast, and while the colors are dark, margins are easy to read. Impressions can be scanned in the dental lab after being coated with powder. Scanning revealed small bubbles or porosities in some impressions, but it did not seem to affect the fit of the restorations. Overall **SplashMax** produced very good results in taking crown and bridge impressions. ■

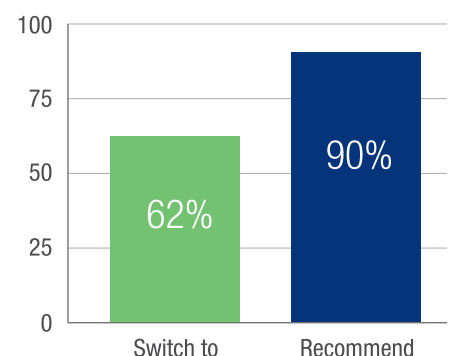
Key Features:



Compared to Competitive Products:



Percentage of Consultants who would:



BeeSure Naturals Ear Loop Face Masks

EcoBee Inc.

(707) 553-6190 (P), (707) 553-6190 (F) | www.ecobeeworld.com

Description

BeeSure Naturals Ear Loop Face Masks are specifically designed to offer excellent protection using eco-friendly materials and maintaining user comfort. These masks are fabricated with over 60% eco-friendly cellulose components, and a portion of all proceeds is donated to environmental causes. **BeeSure Naturals Ear Loop Face Masks** exceed ASTM level 2 standard protection, with a BFE and PFE of greater than 98%. Masks have cushioned ear-loops and offer 15% more breathing room due to their unique quad-fold design. They are free from latex, dye (on the internal surface) and fiberglass, reducing exposure to potential harmful allergens. They are available in boxes of 50 masks in three colors/designs: *Cloud* (white), *Canyon* (red print) and *Glacier* (blue print). **BeeSure Naturals Ear Loop Face Masks** were evaluated by 31 consultants in 705 uses. This mask received an 86% clinical rating.

Suggested Retail Cost

\$10.75/box of 50

Product Features

Eighty-seven percent of consultants responded that it was “somewhat” or “very important” to choose disposable products that are environmentally friendly. **BeeSure Naturals Ear Loop Face Masks** are produced with cellulose materials that promoted easy breathing. The



Consultants' Comments

“They were a great fit around the nose, and it was a bonus to have some environmentally friendly aspects.”

“Canyon print is a fun design.”

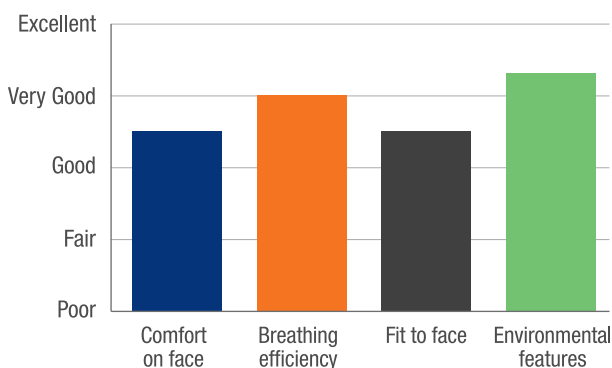
“Size seems larger than my usual mask.”

“Some boxes of masks had a noticeable odor.”

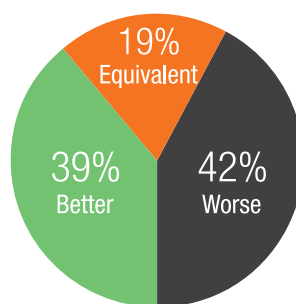
“The white mask should have a mark to distinguish inside from outside.”

inside of the mask is smooth with no lint or fibers that tickle the nose. The smoothness felt papery or stiff to some users. The nose-band creates a good seal at the top of the mask. Consultants reported the large size and stiffness as factors that contributed to gaps in the fit at the bottom of the mask. ■

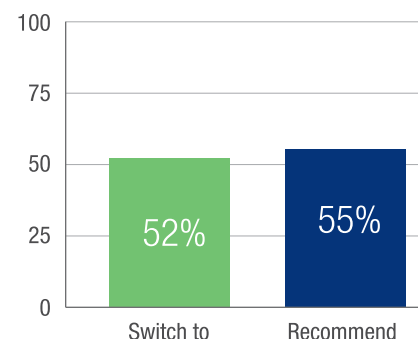
Key Features:



Compared to Competitive Products:



Percentage of Consultants who would:



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