

EMA

The Elastic Snoring & Sleep Apnea Appliance

The elastic mandibular advancement appliance, or **EMA**, is formed from a dental impression and both resemble and fit like a retainer. The major design innovation includes the regulation of the amount of advancement and freedom of mandibular motion. The flexibility of the elastic bands allow for individualization of your patients treatment, and the ability for quick and easy adjustments to provide optimum results.

Bands of varying elasticity move the lower mandible forward into the desired position while allowing the jaw to move in all directions. This positioning of the mandible causes a forward movement of the tongue, reopening the air flow through the oral pharynx (back of throat).

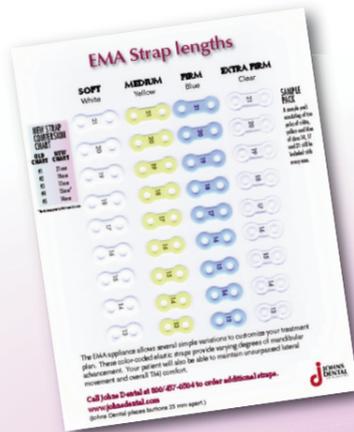
The freedom of movement of the mandible significantly reduces the occurrence of temporomandibular joint dysfunction and pain often associated with similar appliances currently on the market.

The **EMA** appliance also offers long-term stability due to the full occlusal coverage on both arches.

Dr. Donald Frantz



The **EMA** sleep apnea appliance is easily adjusted with a variety of flexible straps to allow for patient comfort and individualization.



The elastic straps are the key to the success of this appliance. Work with your patient to determine the best strength and size. Call us for a copy of the EMA strap chart or find it on our website: www.johndental.com.



The **EMA** system offers a short term appliance that many doctors use to determine if their patient is a good candidate for a sleep appliance. Call Johns Dental for current pricing.

Achieve Regulation of Advancement and Freedom of Mandibular Motion with the **EMA**.

NAPA

Nocturnal Airway Patency Appliance

The Nocturnal Airway Patency Appliance, or **NAPA**, is very effective in reducing the signs and symptoms of both OSA and snoring. In moderate to severe OSA cases, 80% of the patients receive good to excellent results with the **NAPA**. In non-OSA snoring, 95% of those sleeping with a **NAPA** find their night time noise is stopped or greatly reduced. Most patients report they feel alert and energetic the day after wearing the **NAPA**.

The **NAPA** prevents OSA and snoring by several mechanisms:

- Increasing tonicity of tongue by stretching muscle
- Inhibiting movement of muscles of mastication to prevent tongue retraction via the anti-tongue-biting reflex.
- Stabilizing mandibular anchorage of geniohyoid muscle to permit protraction of hyoid bone and tongue.
- Displacing tongue anteriorly by holding mandible in protrusion.



The **NAPA** from Johns Dental

Important: At least one healthy posterior tooth in each quadrant is necessary to construct an effective **NAPA**.

Dr. Peter George



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SILENCER

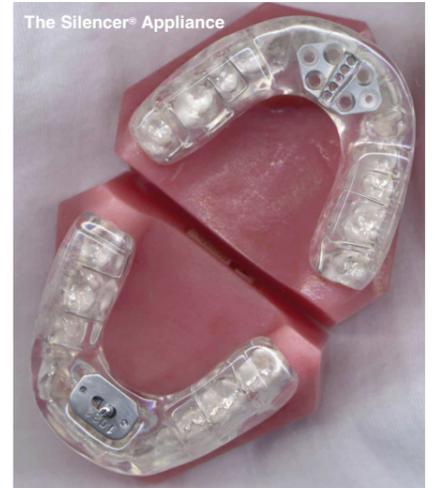
Sleep apnea appliance with titanium hinge

The **Silencer** is a two component, articulated appliance which acts to advance the mandible through a controlled range of protrusive movements to assure that the optimum advancement is achieved.

The **Silencer** utilizes a commercially-pure titanium "hinge" which provides for the incremental advancement of the mandible through a range of 10mm. It also provides for a 6mm lateral movement as well as a 1mm vertical movement of the mandible, which is at the same time being held in the desired protrusive position. The interincisal distance may also be adjusted over a range of 6mm.

All hinges carry a serial number, which allows for tracking and validation of the 5 year warranty.

Dr. Wayne Halstrom



The **Silencer** utilizes a commercially pure titanium "hinge" which provides for the incremental advancement of the mandible through a range of 10mm.



HERBST SLEEP

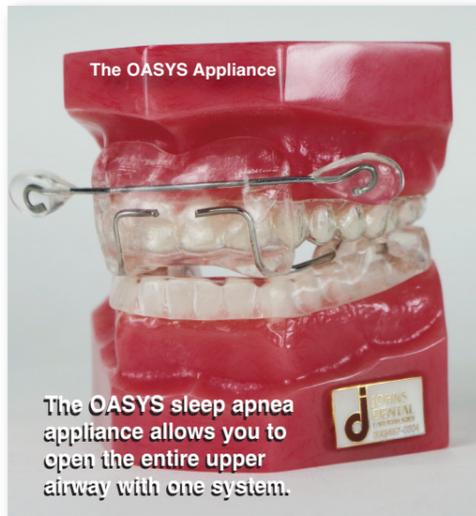


The standard **Herbst** appliance has a long history of treating Class II correction, but the original design has been modified to treat mild to moderate sleep apnea. The one piece telescopic mechanism shown here advances the mandible into a forward position allowing for an improved airway.

The **Herbst Sleep Appliance** is approved as a Medicare sleep appliance. Please be sure to write "Medicare Patient" on your prescription.

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dental device to be reviewed by both the Dental and ENT divisions of the FDA. The OASYS is also approved as a dental device for treatment of snoring and sleep apnea through mandibular repositioning as well as a nasal dilator for reduction of nasal resistance and improved nasal breathing. The OASYS is designed to achieve these unique functions with the following goals:

- Maintain maximum intra-oral volume
- Minimize the forces on the teeth
 - Have no components that extend extra orally through the lips
 - Reduces upper airway resistance
 - Allows mouth breathing to occur, if required

The OASYS appliance uses synergistic dual action that reduces upper airway resistance from nose to throat, that prevents airway collapse. This system functions by repositioning the mandible in addition to acting as a nasal dilator.

The OASYS is the first

Mark Abramson, DDS

TAP1®, TAP3 & TAP3 Elite

Thornton Adjustable Positioner



The Thornton Adjustable Positioner® (TAP®) is a superior mandibular advancement device for the successful treatment of snoring and sleep apnea. All TAP products fit comfortably in the mouth and the compact hardware provides more room for the tongue allowing the lips



The TAP I and TAP III Elite are currently approved for Medicare patients. Please be sure to write "medicare patient" on your prescription. Call Johns Dental for more details about the TAP family of sleep appliances.

to close. The interchangeable hooks accommodate Class I, II and III bites and increase the vertical distance between the upper and lower teeth.



Dr. Dennis Bailey says one of the first steps in any dental treatment is to normalize the tongue function. Johns Dental fabricates several types of habit appliances like this one to retrain a tongue thruster.



Dr. Jay Gerber says a neuromuscular evaluation prior to any treatment is crucial for long-term effectiveness and stability.



Bruxers tend to collapse their bite, TMJ space and airway by slowly grinding the occlusal surface. This can be a warning sign for future sleep disorders.

Doctors today are finding a variety of causes relating to sleep disorders that may need to be corrected before a sleep apnea appliance is used.

Some of the key areas are poor habits like tongue-thrusters and bruxers. A habit appliance may be needed first to retrain the tongue so other treatment can continue more effectively. Bruxism is a poor habit that can be treated prior to the sleep disorder or it may affect which sleep apnea appliance is best.

Other doctors, like Dr. Jay Gerber, prefer to check the neuromuscular system before any long term treatment is performed. Short term and long term splints can be fabricated at Johns Dental and will begin retraining proper jaw position.

Many doctors use Ceph tracings to help determine the best mandibular position in relationship to the maxilla. Today, doctors are finding proper alignment can improve the airway.



Computer cep tracings are a good way to determine the optimal positions of the maxilla and mandible for an improved airway.



SLEEP APNEA APPLIANCES

