

# What is *Sleep Disorders Dentistry*



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# *Sleep Disorders Dentistry* *is the Treatment of*

## *Malfunction of Breathing During Sleep*

- Three Main Categories
  - Snoring
  - Upper Airway Resistance Syndrome (UARS)
  - Obstructive Sleep Apnea (OSA)

## *Sleep Apnea found in*

4% of men and 2% of Women (Age 40)

Increases with each decade of life

Higher in certain high risk groups

78% of Long Distance Truck Drivers

Highest on-the-job mortality of all professions

## *Snoring found in*

40% of men and 20% of women

Increases with each decade

# *Some Perspective*

- Six of 10 adults say they have sleep problems
- Daytime sleepiness interferes with Daily Activities in four of 10 adults
- Annual direct/indirect cost approaching \$200 Billion (US)
- Over 100,000 motor vehicle accidents annually are sleep-related (US)
- Disasters such as Chernobyl, Three Mile Island, Challenger, Bhopal, and Exxon Valdez officially attributed to errors in judgment induced by sleepiness & fatigue.

Source: University of Maryland Medical Center

<http://umm.edu/programs/sleep/health/sleep-disorders#ixzz2fdCar5U3>

*Yearly Cost to Society (USA): Approaches \$200 Billion*

- *Why me*
  - Narrowing of the upper air-passages
  - Reduced airway muscle tone
  - Nasal obstruction
  - Obesity
  - Drugs
  - Alcohol
  - Fatigue
  - Smoking
  - Heredity

- *Typical Screening Questions*
  - How Restful or Restless is your Sleep?
  - How often do you Awaken during your Sleep Period?
  - Witnessed Apneas?
  - Witnessed Snoring?
  - Do you Awaken Tired?
  - Daytime Fatigue?
  - Do you have Morning Headaches

## Screening Questionnaire...

- What is the likelihood of falling asleep under the following circumstance  
0 = Never, 1 = Slight Chance, 2 = Moderate Chance, 3 = High Chance

<u>Situation</u>	<u>Chance of Dozing</u>
Sitting and reading .....	_____
Watching TV .....	_____
Sitting inactive in a public place .....	_____
A passenger in a car for an hour without a break .....	_____
Lying down to rest in the afternoon .....	_____
Sitting and talking to someone .....	_____
Sitting quietly after lunch without alcohol .....	_____
In a car, while stopped for a few minutes in traffic .....	_____
TOTAL SCORE .....	_____

## Epworth Sleepiness Scale

*Score over 10 suggests a Sleep Disorder*

*If you scored higher than 10*

- You Should
  - See your Doctor
  - You may need an overnight sleep study





# *Sleep Apnea Treatments*

Surgery?  
Lifestyle Changes?  
CPAP?  
Oral Appliance?

*What do I do?*

# Spectrum of Disease & Recommended Therapy

*as per American Academy of Sleep Medicine Sleep 2006*

*\*for patients that cannot be managed with Lifestyle Changes*

**Airway Orthotics**

**Snoring**



**UARS (Sleepy Snorer)**



**Mild Sleep Apnea (5-15 Events/hour)**



**Moderate Sleep Apnea (15-30 Events/hour)**

**nCPAP**



**Severe Sleep Apnea (Over 30 Events/hour)**

## *Airway Orthotics: the Facts*

- Airway Orthotics considered First Line Therapy for Snoring, Mild, Moderate Sleep Apnea *Sleep 2006:29:2*
- 90% patient compliance after 2 ½ years *Cranio 2000:18:2*
- Ten of eleven prefer an Airway Orthotic over nCPAP for their long term treatment. *Thorax 1997, 52:362-368*

*Know the Facts Before You Decide Which Therapy is For You*



# Mandibular Advancement Devices

## *Most Effective Airway Orthotics*

*Some Examples*



Dorsal



Narval



Tap



Example of Orthotic in Hand



EMA



SUAD



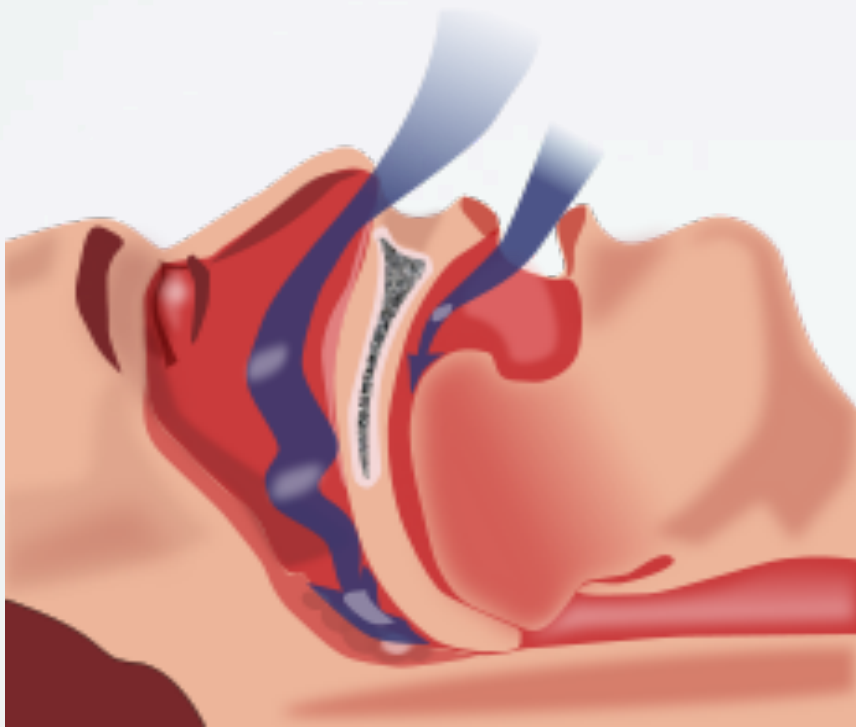
Silencer



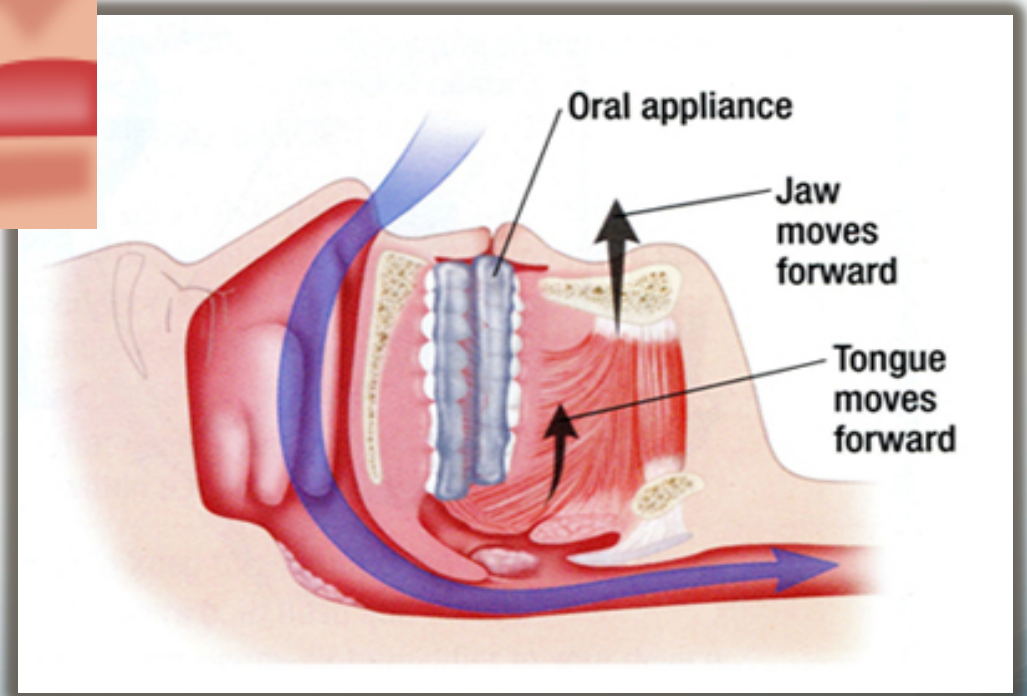
Example of Orthotic in Mouth



Herbst



**Airway Blockage Without Orthotic**



**Airway Splinted Open With Orthotic**

# ● *Airway Orthotic Side Effects:*

- Mostly Short lived and Upfront
  - Mostly due to resisting the new jaw position during sleep
  - Once jaw resistance stops – the discomforts stop
- Excessive Salivation lasts for approximately 2 Weeks
- Long Term Wear is Associated with Bite Changes
  - This same side effect occurs with long term nCPAP wear
- No permanent cases of TMJ have been reported



# *Sleep Disorders Dentistry*



**The Dentist, Physician and Sleep Specialist work together in the treatment of Snoring and Sleep apnea.**

***Communication is Key to Optimum Treatment***

*Thank You & Sweet Dreams*



**Sleep Disorders Dentistry**

*“Snoring & Sleep Apnea Solutions”*

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