Oral Appliances for Sleep Apnea: What's Happening in 2014?

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Diplomate American Board of Dental Sleep Medicine

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So What is Happening?

- Today
  - Obstructive Sleep Apnea overview
  - Oral Appliance designs and Selection
  - Administrative and Insurance Approaches

Lots of Interest

- More awareness in the general population
- More media attention
- More interest among physicians and dentists
- Survey ourselves

More attention by physicians

- More diagnostic centers
  - In 1995, only two sleep centers (Audubon and University) in Metro Louisville
  - In 2014, there are twenty-two
  - Were 23. KentuckyOne saw fit to close their Jewish East Sleep Center

- More use of Home Sleep Test (HST) units
  - Insurance driven
  - Sleep centers have bought in: they stock the units, provide instruction and interpretation.
  - Promoted to dentists as a marketing strategy.

General Population

- More media coverage
- More articles, features, and products

Online Resources

- Searching for Obstructive Sleep Apnea (OSA) on YouTube yielded 23 videos on the first look.

- Topics from Exercises to Off-the shelf Oral Appliances (OA's) to Vitamins to Surgery

Disclosures

- I do business with all of the Laboratories mentioned in this presentation
- I have treated patients using all of the custom made Oral Appliance designs included in this presentation
- I have been in full time practice limited to Oral Appliances for OSA since October 2005


AMERICAN
ACADEMY OF
DENTAL
SLEEP
MEDICINE
®
Member of the AADSM

My Previous Job


MAN'S FLIGHT
THROUGH LIFE IS
SUSTAINED BY THE
POWER OF HIS
09.26.2011 11:04

- Man’s Flight through Life is Sustained by the Power of his Knowledge

Why Provide Dental Sleep Medicine?

- Some potential reasons why it may be appealing include: **A dentist can help save lives!** Untreated OSA (Obstructive sleep apnea) has been linked to many medical disorders, including hypertension, stroke, headaches, diabetes, obesity, gastro esophageal reflux disease, depression, and sexual dysfunction. (181 Chervin,R.D, 1996)

Mortality Risk with OSA

- From Wisconsin Cohort Study
- 18 year follow up data
- Hazard Ratio for all-cause mortality comparing severe OSA vs no OSA was 3.9
- Hazard Ratio for cardiovascular mortality comparing severe OSA vs no OSA was 5.2

Why Do Oral Appliances?

- Patients can really benefit from them. They FEEL BETTER!
- Clinically Simple!
- Increasing interest/awareness.
- You can get paid for them!

Patient Feedback Is Positive

- Providing an oral appliance to someone who is suffering with sleep deprivation, mood swings, depression, marital issues, work related issues, etc. can change their life! These patients are thankful for the effects of the appliance and their positive feedback can be very rewarding.

Oral Appliance Treatment lowers Bleed Pressure

- “Effect of oral appliances on blood pressure in [OSA]: a systematic review and meta-analysis”
- Iftikhar IH et al J Clin Sleep Med 2013 Feb 1;9(2): 165-174
- Total 7 studies with 399 participants
- “The pooled estimate shows a favorable effect of OAs on SBP, DBP, and MAP.

What is Obstructive Sleep Apnea anyway?

Incidence of OSA

- Wisconsin Cohort Study (started 1988)
- Baseline 1900 State employees age 30-60
- Screened by questionaire for risk
- At risk sample tested with PSG
- Follow up testing q 4 years

Baseline Results

- Usually reported as 2% in women, 4% in men
- This included a stringent excessive daytime sleepiness (EDS) positive response
  - Falling asleep against wishes
  - Not rested after adequate hours sleep
  - Sleepiness affecting daily function

Baseline PSG data

- AHI > 5 9% of women, 24% of men
- AHI > 15 4% of women, 9% of men
- Some increase over time, credited to obesity trends

NEWS | A3

G A LOT OF TOP
BACKYARD.

DID JESUS HAVE A WIFE? W
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SKINNY ON WEIG

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TRACTING A LOT OF TOP
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NEWS | A3
DID JESUS HAVE A WIFE?
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SMASHBURGER BURGER SMASHER
HAS A DEAL ON A JUICY AND DEL
SMASHBURG
BUY ONE, GET ONE FREE.


Sleep Study Reports

- What data to look for?

TORY: This is a 63 year old male that presents with complaints of excessive daytime
less sleep, loud snoring, witnessed apnea, mouth dryness, weight change, kicking legs
p walking, sleep talking, sleep paralysis, hallucinations and having difficulty staying awa
patient has a history of high cholesterol, hernia repair and arthritis. The patient's Epwo
piness Scale score is 12. The patient's body mass index is 30.0. The patient is referre
p center regarding possible Obstructive Sleep Apnea.

OCEDURE: This is a nocturnal technician attended polysomnography via the Ameri
icine Protocol utilizing continuous digital recording. Recorded channels included: EE
rnational 10-20 electrode placement), eye movement, chin EMG, nasal and oral airfl
ratory effort, oxymetry, body position, snoring sound, pulse rate and limb movement.

MMARY:

Sleep Architecture: Lights out were called at 22:00:14. Lights on were called at 0
rded time was 633.6 minutes, with a total sleep time of 314.0 minutes and a sleep
%. The patient's sleep latency was 15.0 minutes. Latency to REM was 44.0 minut
of Stage N1 sleep, 77.1% stage N2 sleep, 0.0% stage N3 sleep, and 16.9% REM
ber of arousals was 24. Arousal index was 4.6.

Respiratory Data: During the study the patient had 59 episodes of apnea/hypop
ent oxygen desaturations or greater making the **Apnea/Hypopnea Index (AHI) 1**
hour. Mean length of the apnea/hypopnea was 20.1 seconds and the longest w

NARRATIV

ME:

4/24/1950

ORDING: 12/12/2013

M.D.: Jeffrey Nau, MD

D.: Zaka Khan, MD

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atency to REM was 44.0
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59 episodes of apnea/hy
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ons or greater making the **Apnea/Hypopnea Index (**
f the apnea/hypopnea was 20.1 seconds and the lon

ance Index (RDI) was **13.0** events per sleep hour.
pisodes of mixed apnea, 25 episodes of central apne
pisodes of hypopnea with arousal but not necessarily
re were 7.1 events per sleep hour, and during **REM**
spiratory arousal index was 13.0. Respiratory distur
tion was **13.7** events per sleep hour and the patient
ratory disturbance index while sleeping on both sides
slept for 95.5 minutes on both sides.

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sition was 13.7 events per sleep hour and the p
piratory disturbance index while sleeping on bo
t slept for 95.5 minutes on both sides.

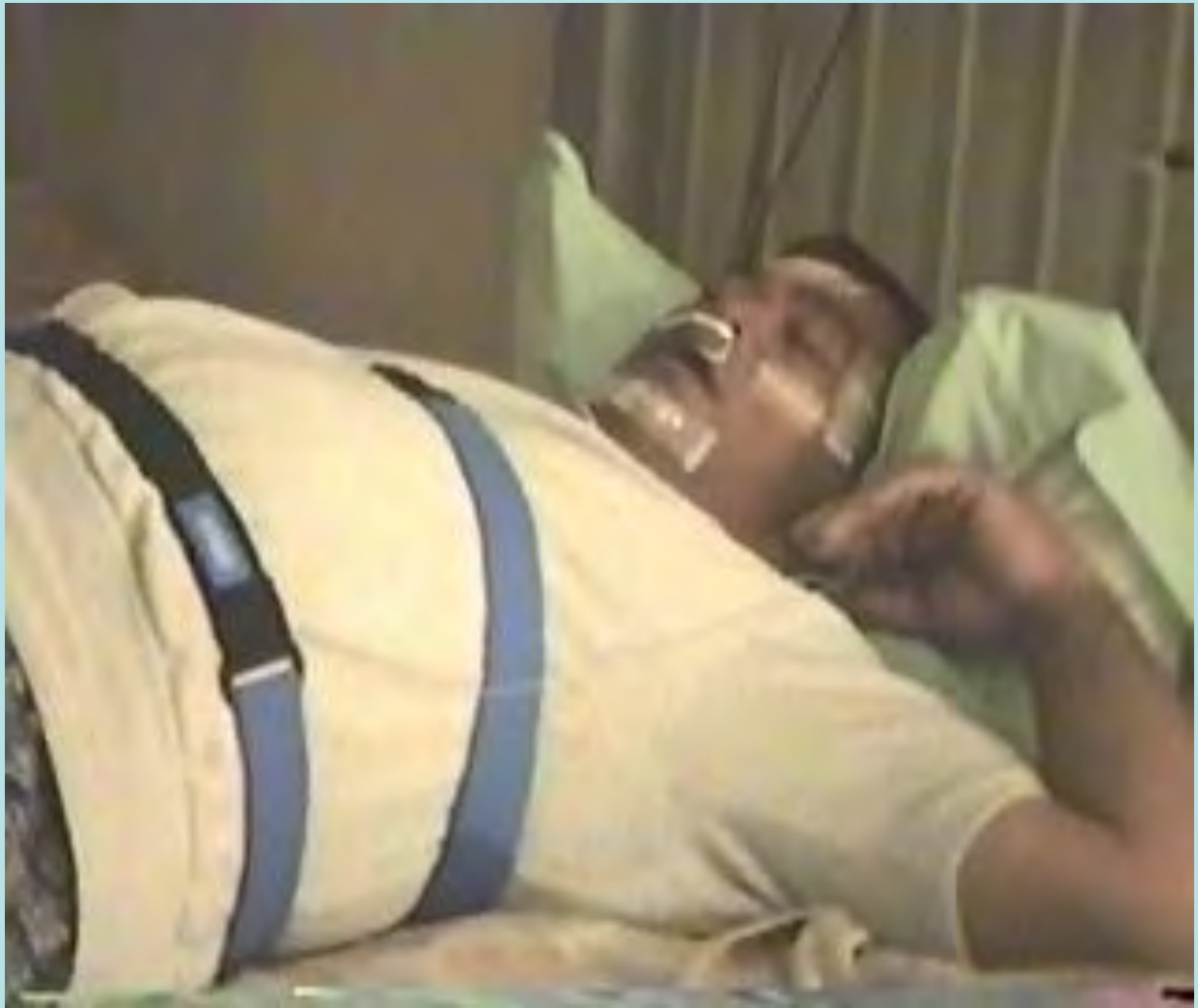
patient spent 99.6 percent of sleep time with ox
ient spent 0.4 percent of sleep time with oxyge
t oxygen saturation was 86%.
noted during the sleep study.

A 10(+25ca+1ma) AHI 11.3
M 23

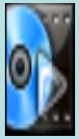
RDI 13.0
41.9 RE
13.75 uf
5.25 id

low O2 86%
T 88% 0.4%

Actual Sleep Study

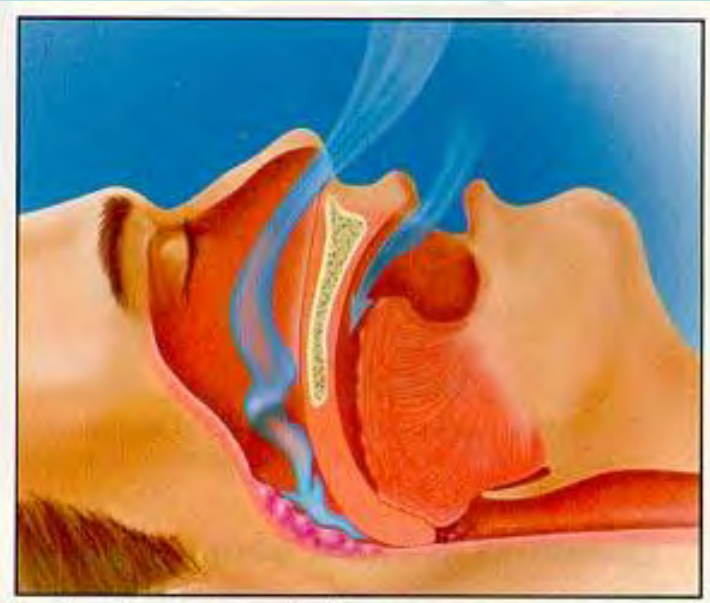


Sleep Study



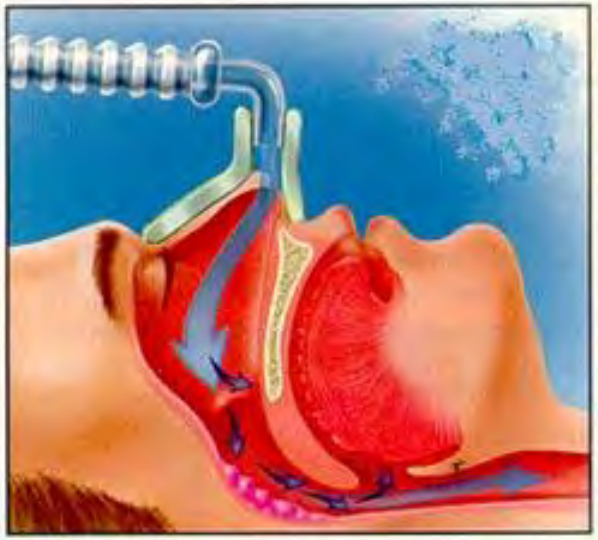
obstructive sleep apnoea 43 seconds heart stops for 10 secs - YouTube(1).wmv

Airway Blocked

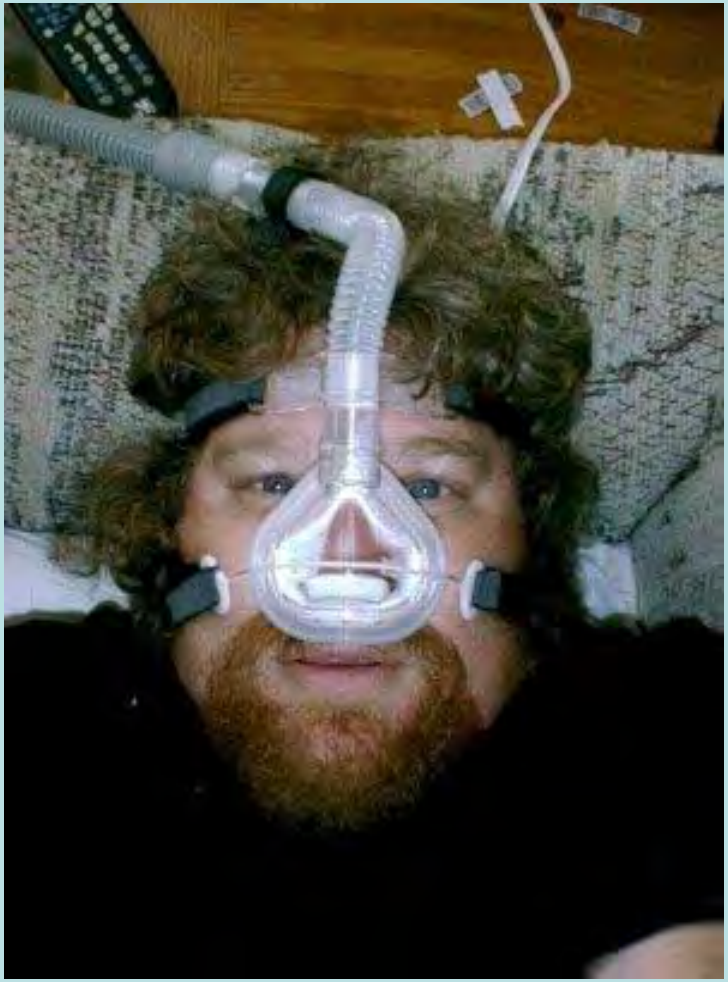


During sleep apnea, air flow is completely blocked.

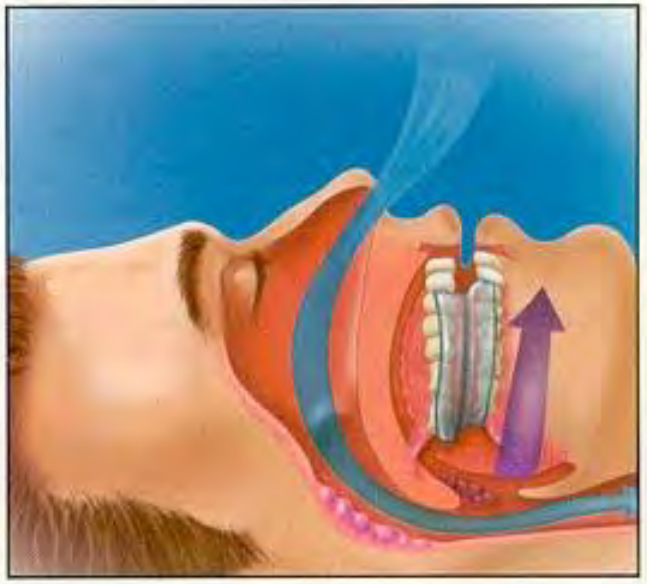
CPAP



With CPAP, a mask over your nose gently blows air into your throat to keep your air passage open.



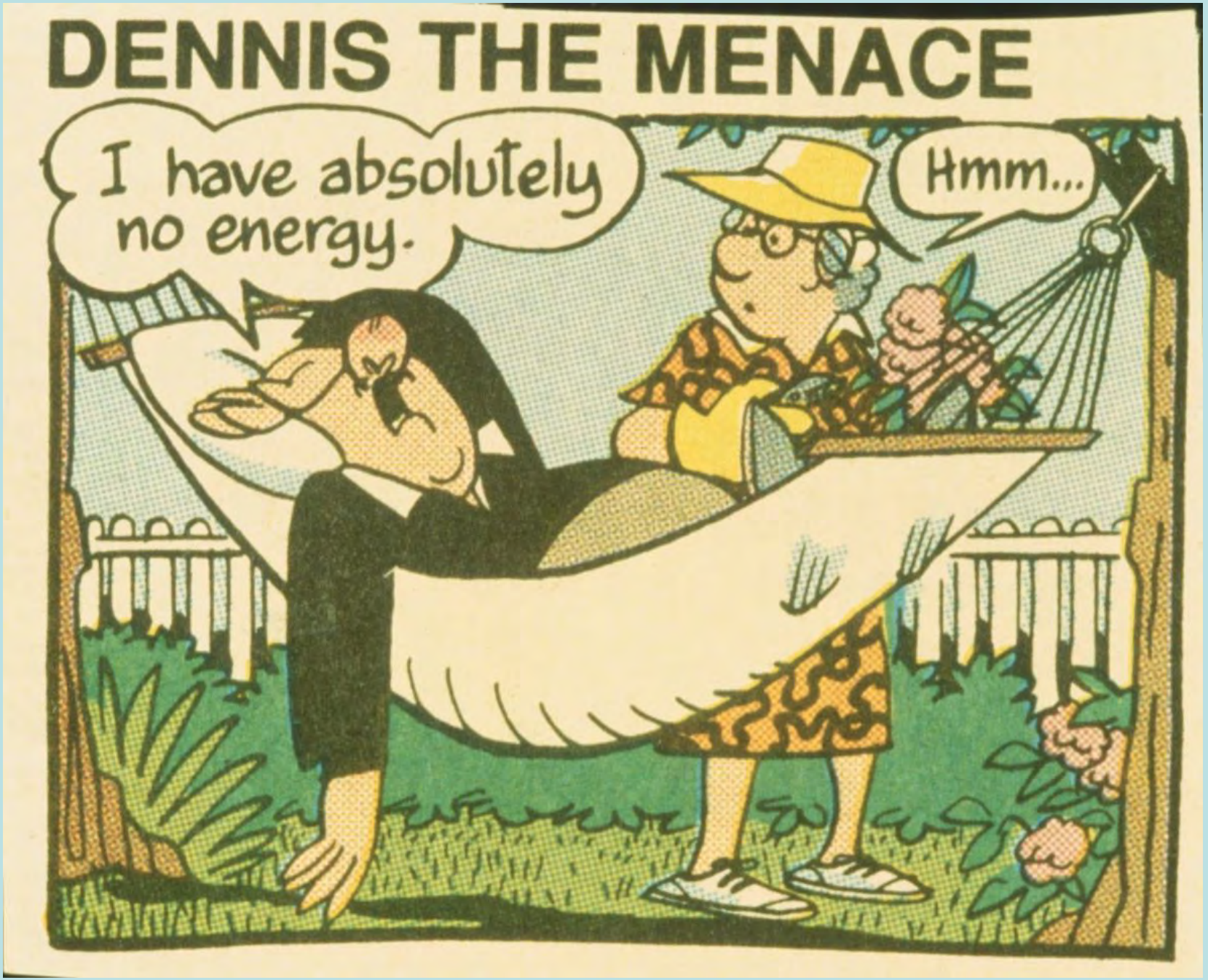
Oral Appliance in Place



With oral devices, throat structures move out of your air passage, allowing air to flow freely through your throat.

Who are these Oral Appliances For?

- Stereotype
- Actual
- Practice Parameters


DENNIS THE MENACE
I have absolutely no energy.
Hmm...

Our Patient Profile

- Total Examined/Evaluate 407
  - 51% Male 49% Female
- Average Age 50.2
  - Range 16-86

Average BMI 28.8

- Range 18.0-46.2

Average AHI/RDI 28.2

- Range 3.6-114.0

AASM Practice Parameters

- Practice Parameters for the Treatment of Snoring and Obstructive Sleep Apnea: An Update for 2005.

- An American Academy of Sleep Medicine Report

- SLEEP, Vol 29, No 2, 2006

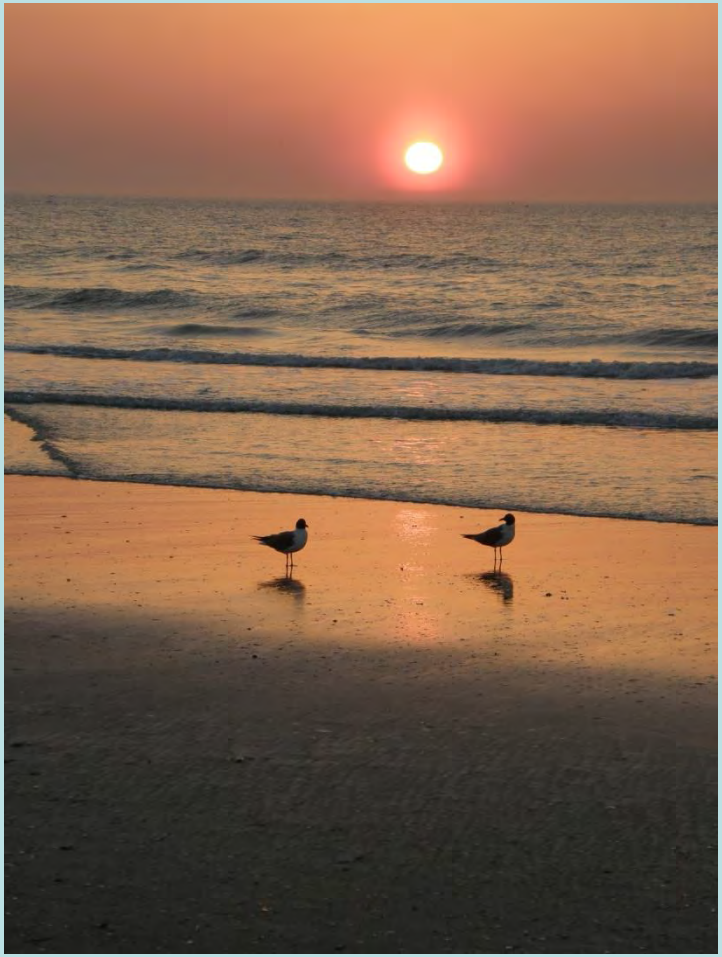
Oral Appliances Are For:

- Snoring without OSA
- Mild to Moderate OSA who prefer OA's
- CPAP Resistant/Intolerant
- "Silent" on Severe OSA- an alternative when CPAP and surgery are not useable

Other Possibilities

- CPAP Users requiring high pressures
  - Concurrent Oral Appliance use may permit lower pressure settings
- Frequent Fliers
  - Portability
- Back-Country Trekkers/Back-Packers or
- Third World Mission Trips
  - Straight mechanical device


OARS

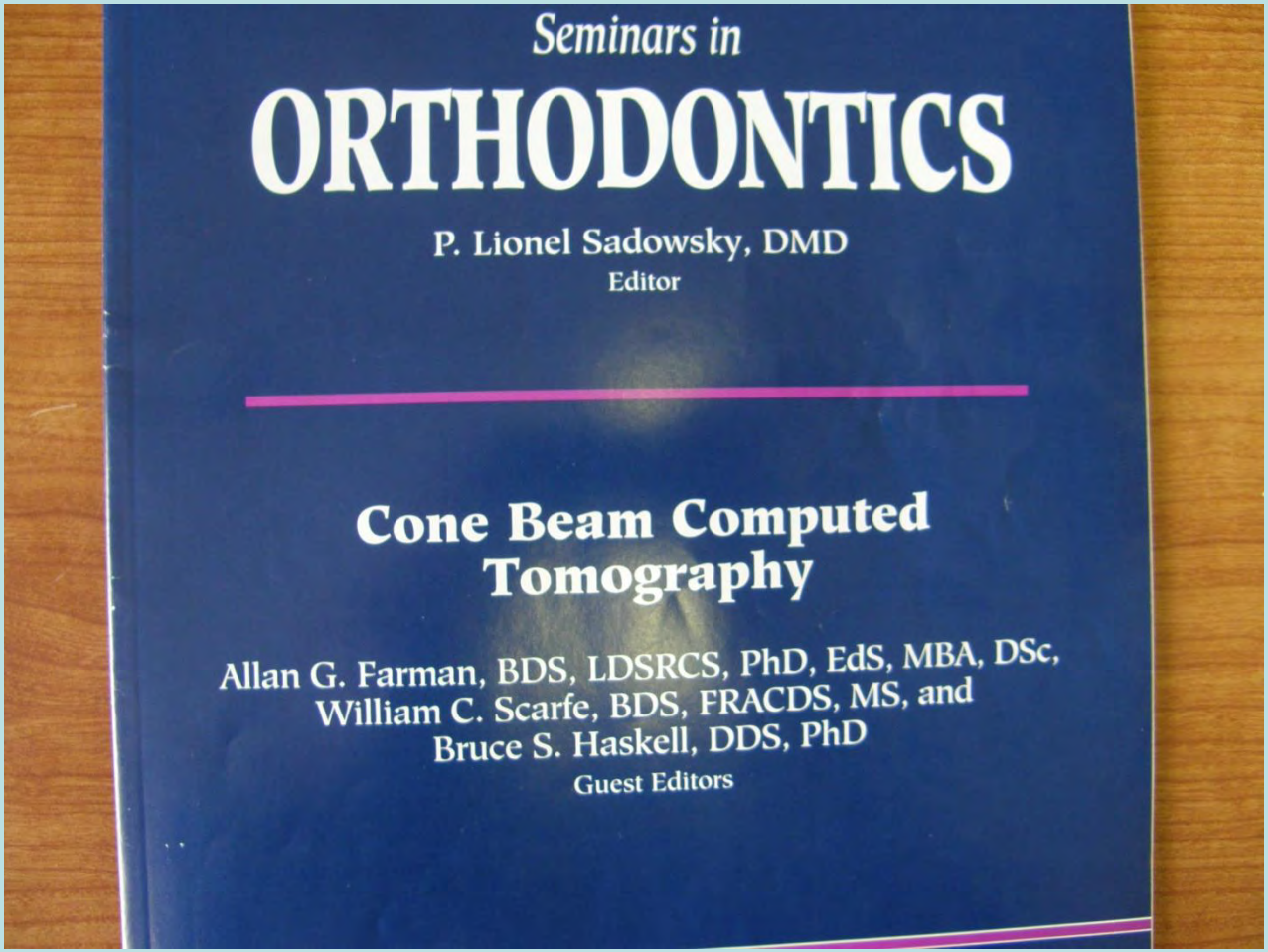


How do Oral Appliances Work?

What actually happens to the pharyngeal airway when the mandible is moved more forward?

Cone Beam CT Imagery

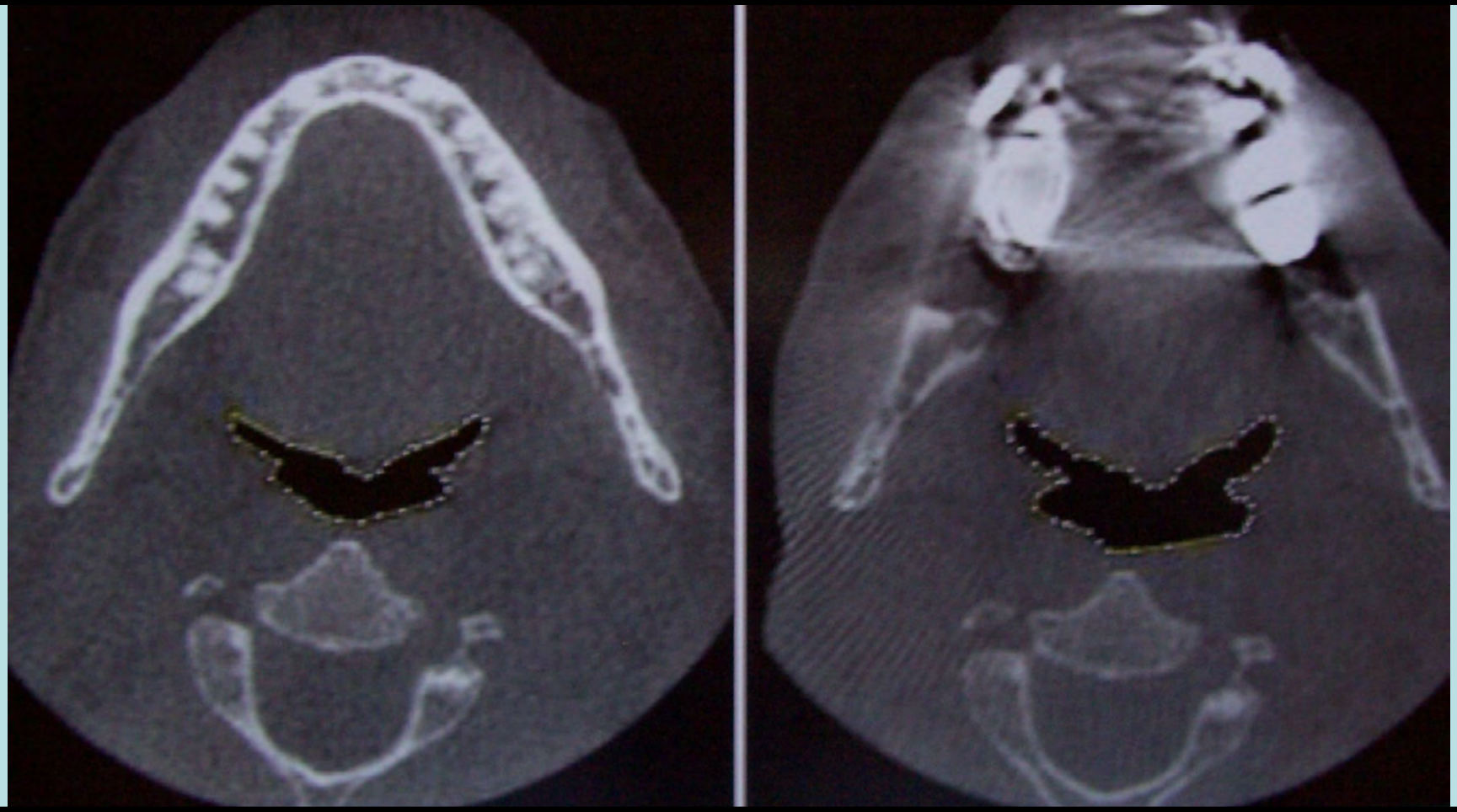
- University of Louisville School of Dentistry
- Dr William Scarfe, Dr Allan Farman, Dr Bruce Haskell, Dr Jennifer Haskell, Dr James Scheetz, Dr Michelle Brammer,
- InVivoDental, Anatomage, San Jose CA
- Dolphin Imaging, Chatsworth, CA
- Image J, NIH

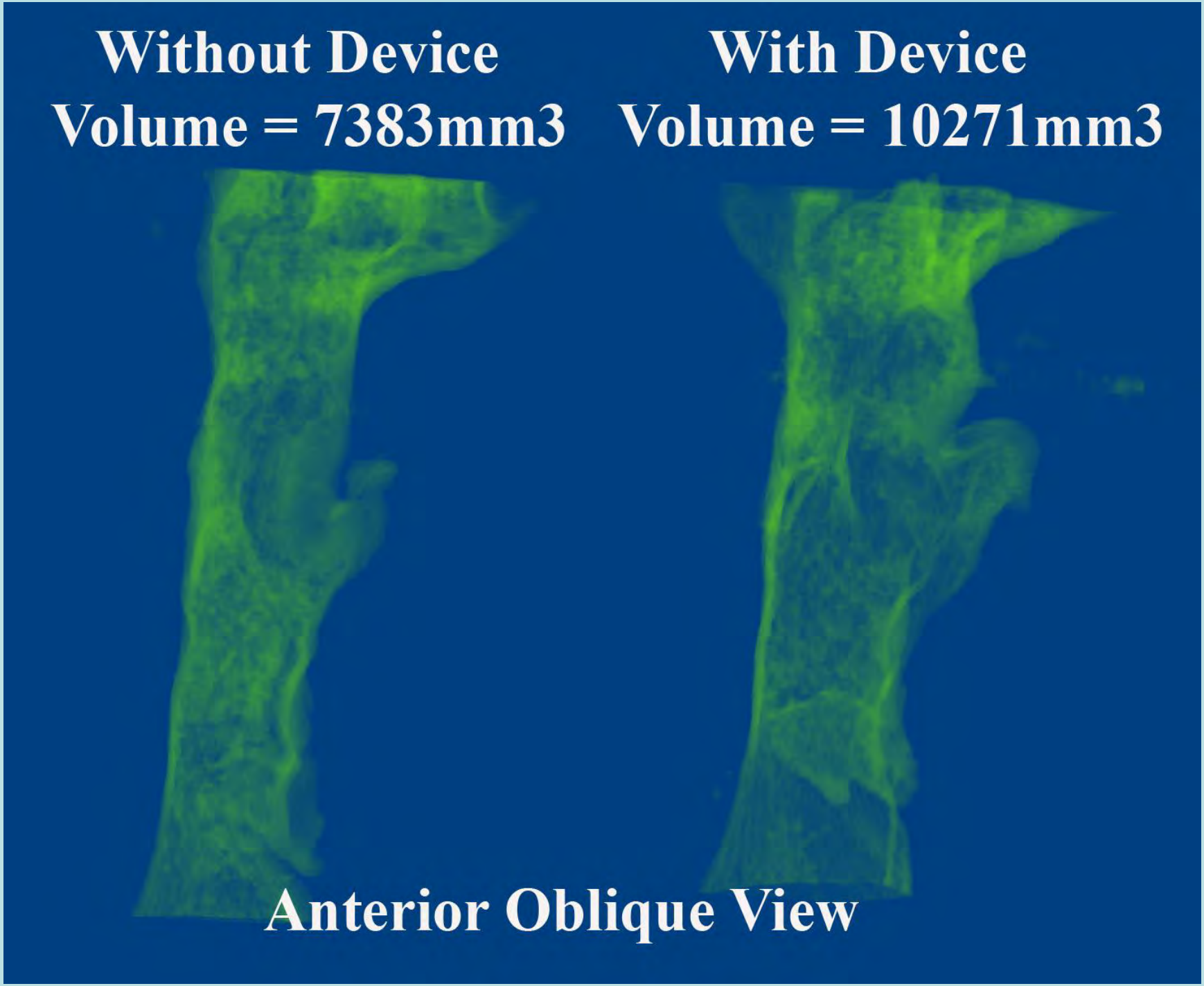

Seminars in
ORTHODONTICS
P. Lionel Sadowsky, DMD
Editor
Cone Beam Computed Tomography
Allan G. Farman, BDS, LDSRCS, PhD, EdS, MBA, DSc,
William C. Scarfe, BDS, FRACDS, MS, and
Bruce S. Haskell, DDS, PhD
Guest Editors

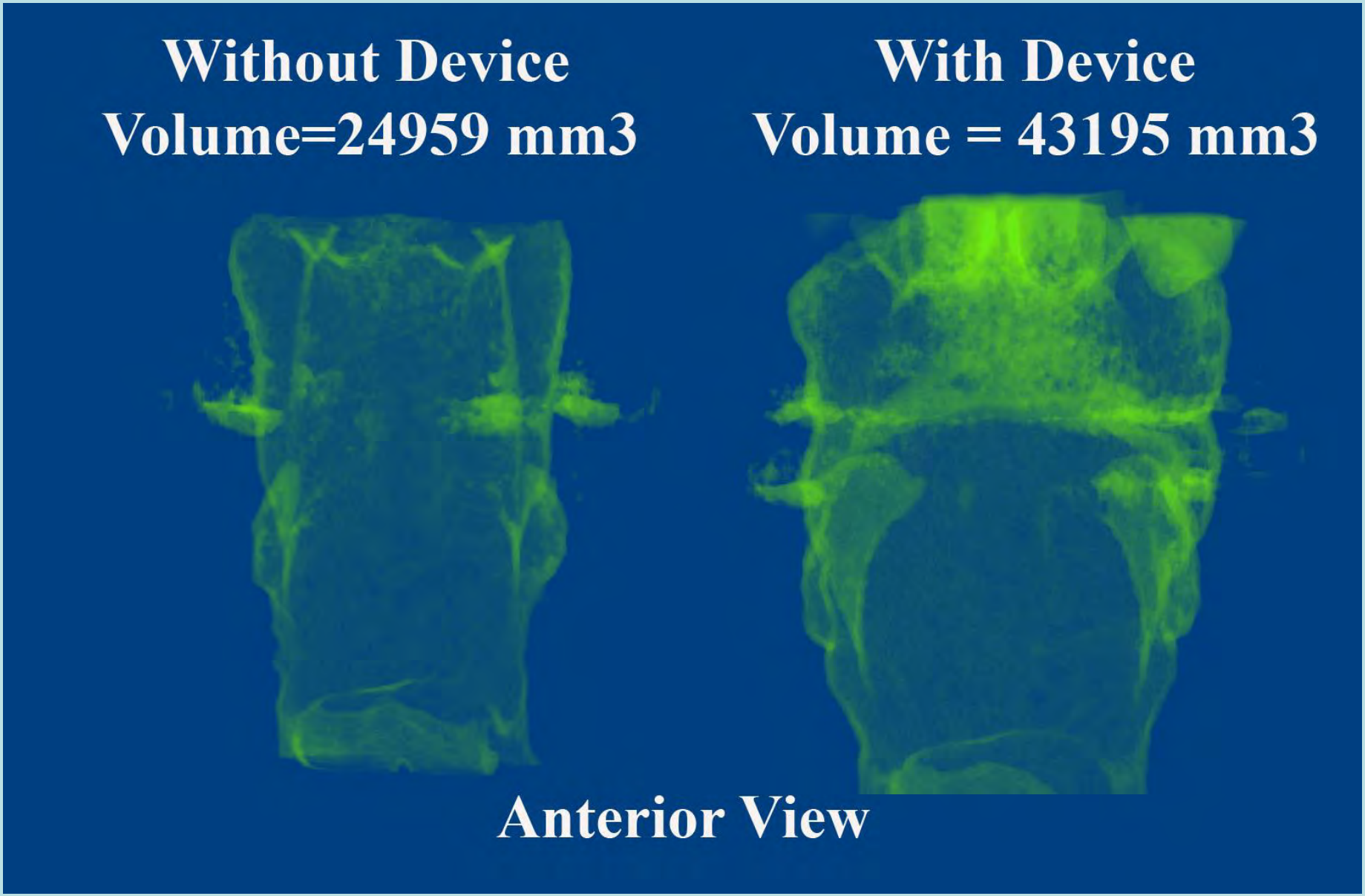
- Effects of Mandibular Advancement Device (MAD) on Airway Dimensions Assessed with Cone-Beam Computed Tomography
- Seminars in Orthodontics, Vol 15 Issue 2, June 2009
- Dr Jennifer Haskell's Master's Thesis

MAD OUT

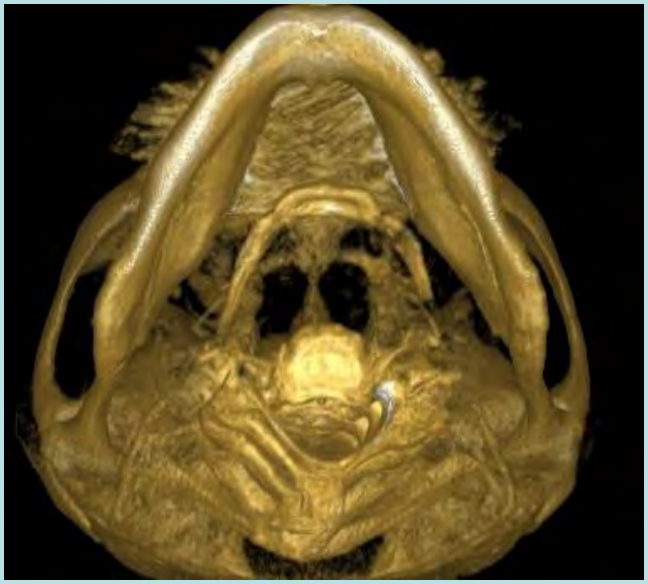
MAD IN

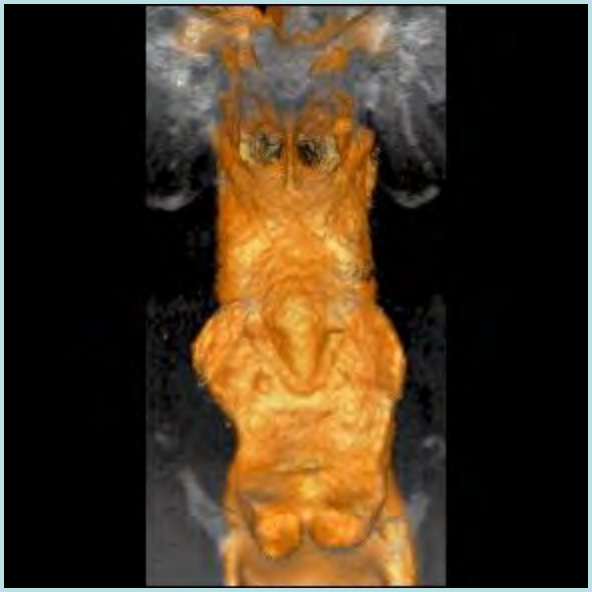


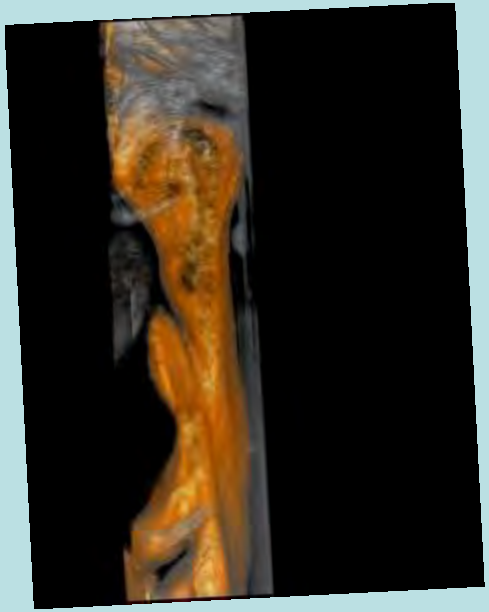

Without Device
Volume = 7383mm3
With Device
Volume = 10271mm3
Anterior Oblique View



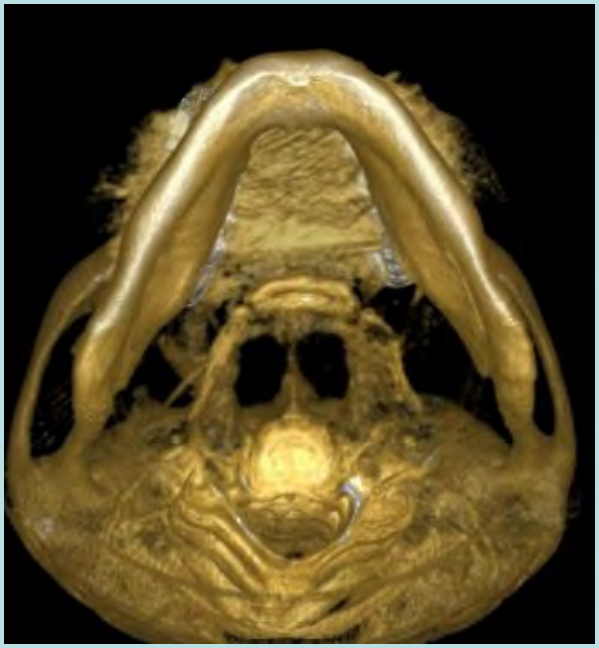
Super-responder. Horizontal movement = 12 mm.

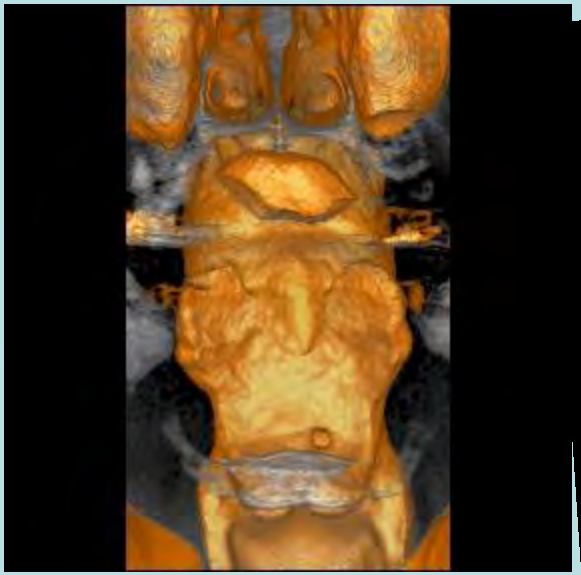


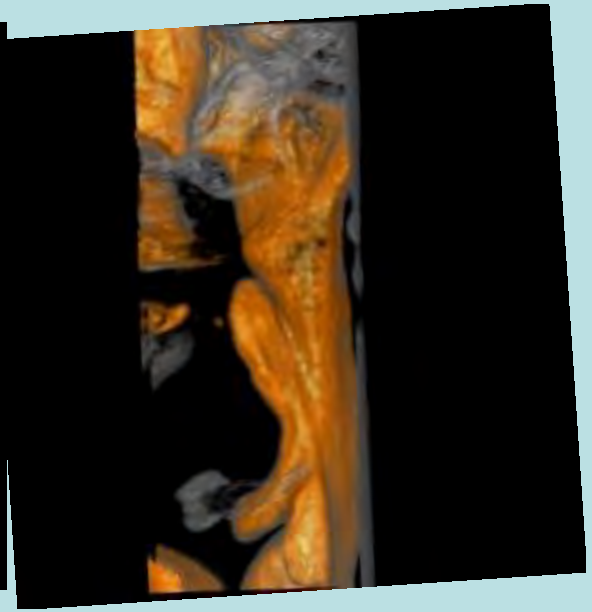




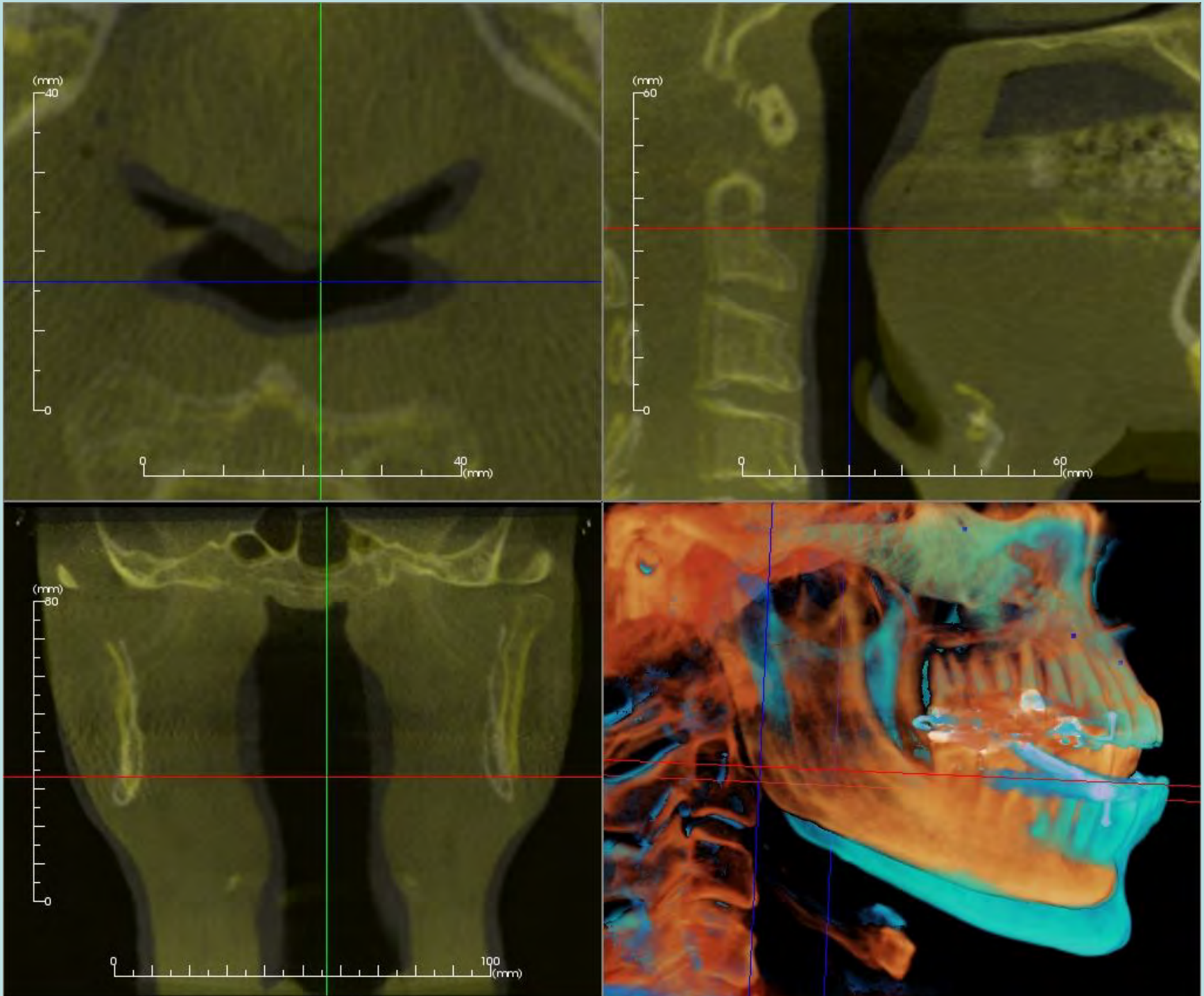
WITHOUT DEVICE







WITH DEVICE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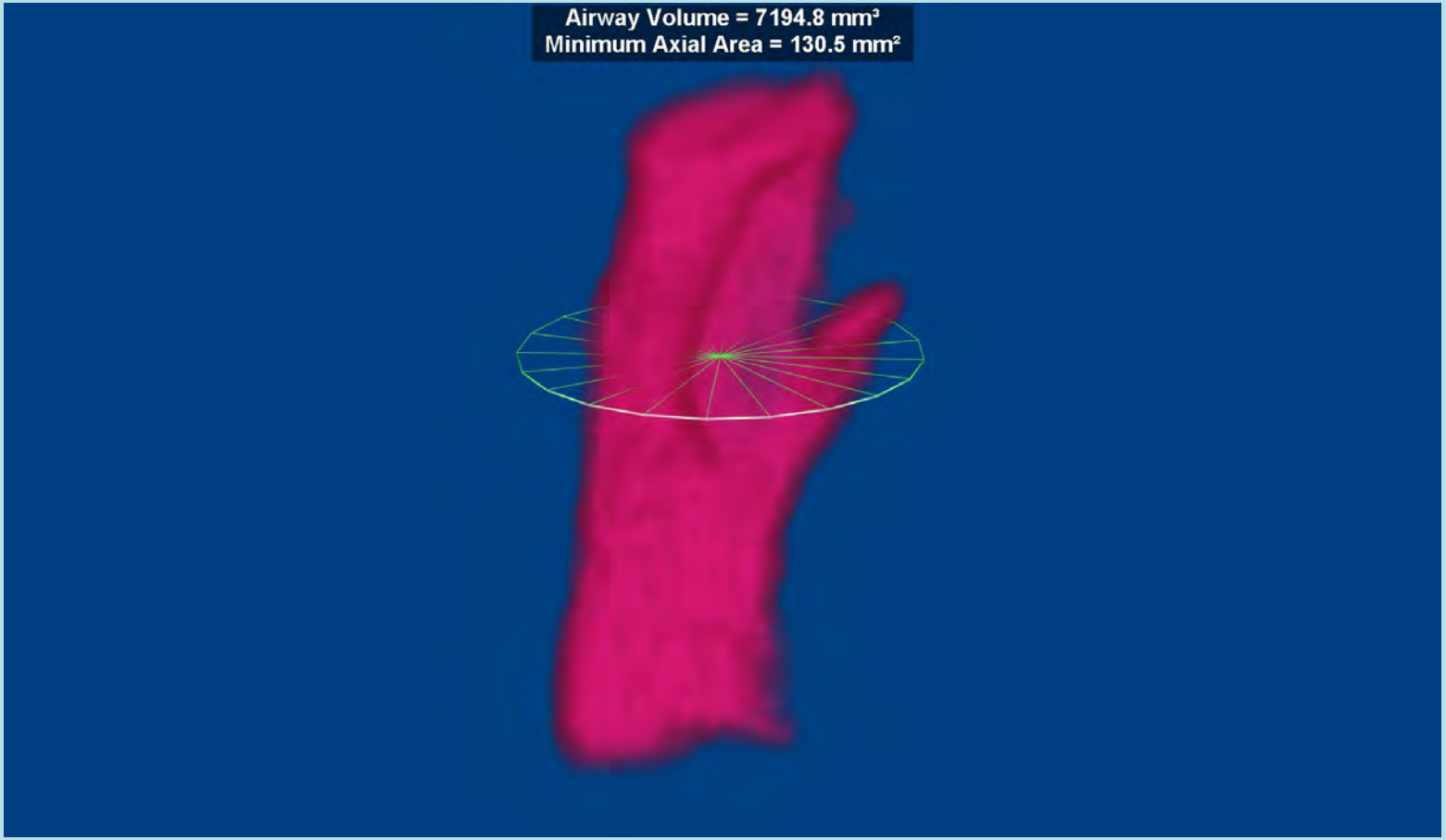
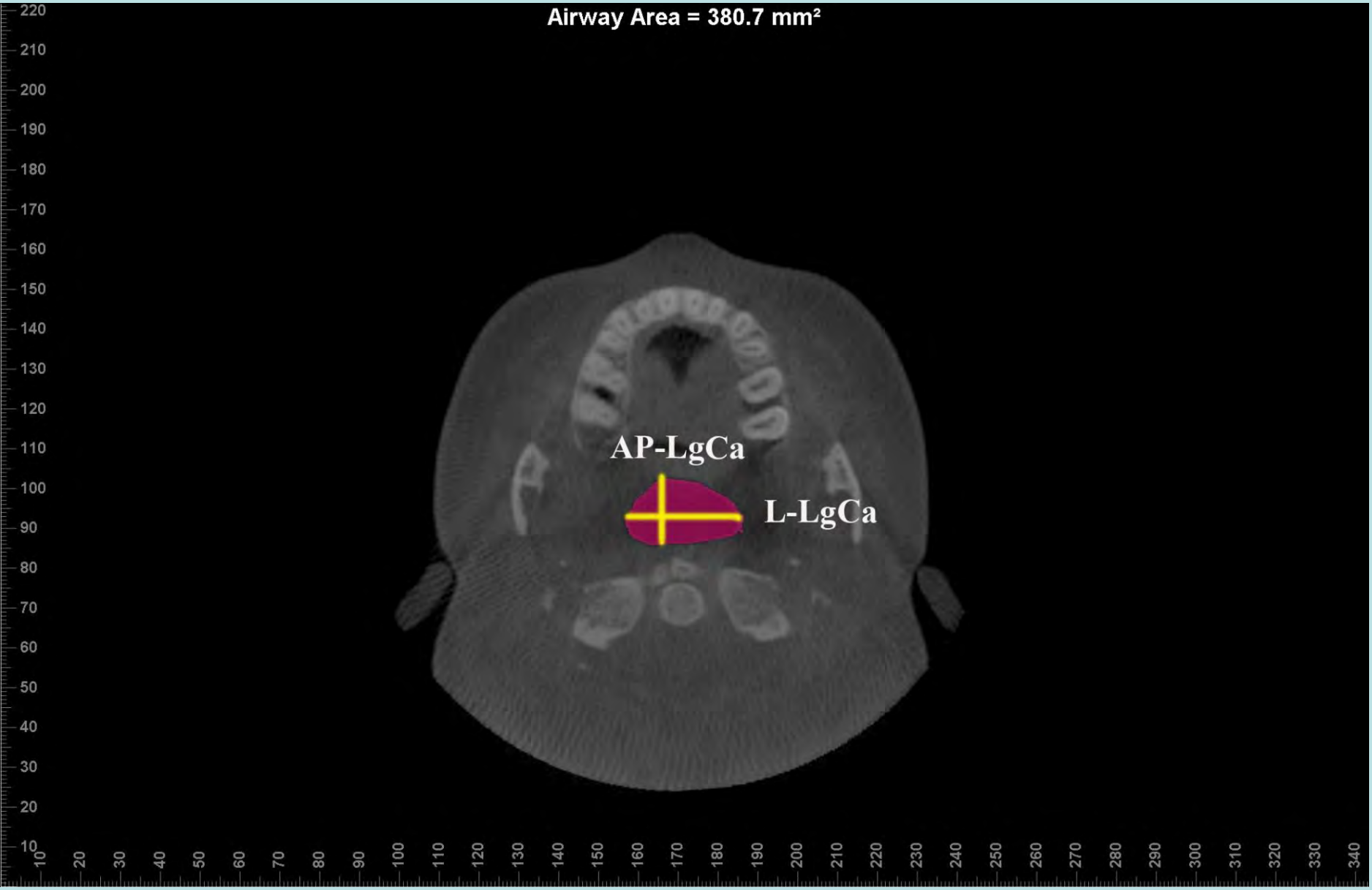
Volume of Reconstructed Airway



Dolphin measures the volume and finds the axial slice with the smallest cross-sectional area, shown here as a wheel around the airway.



Airway area of (LgCa) shown in pink.
Anterior-Posterior (AP-LgCa) and Lateral (L-LgCa) dimensions shown in yellow.

What correlated with what?

- Horizontal forward movement of the mandible correlated with:
- Airway volume increase
- Largest cross-sectional area increase
- Cross-sectional area at C2 increase
- Lateral dimension at C2 increase

- Can you see any of those changes on a lateral ceph?

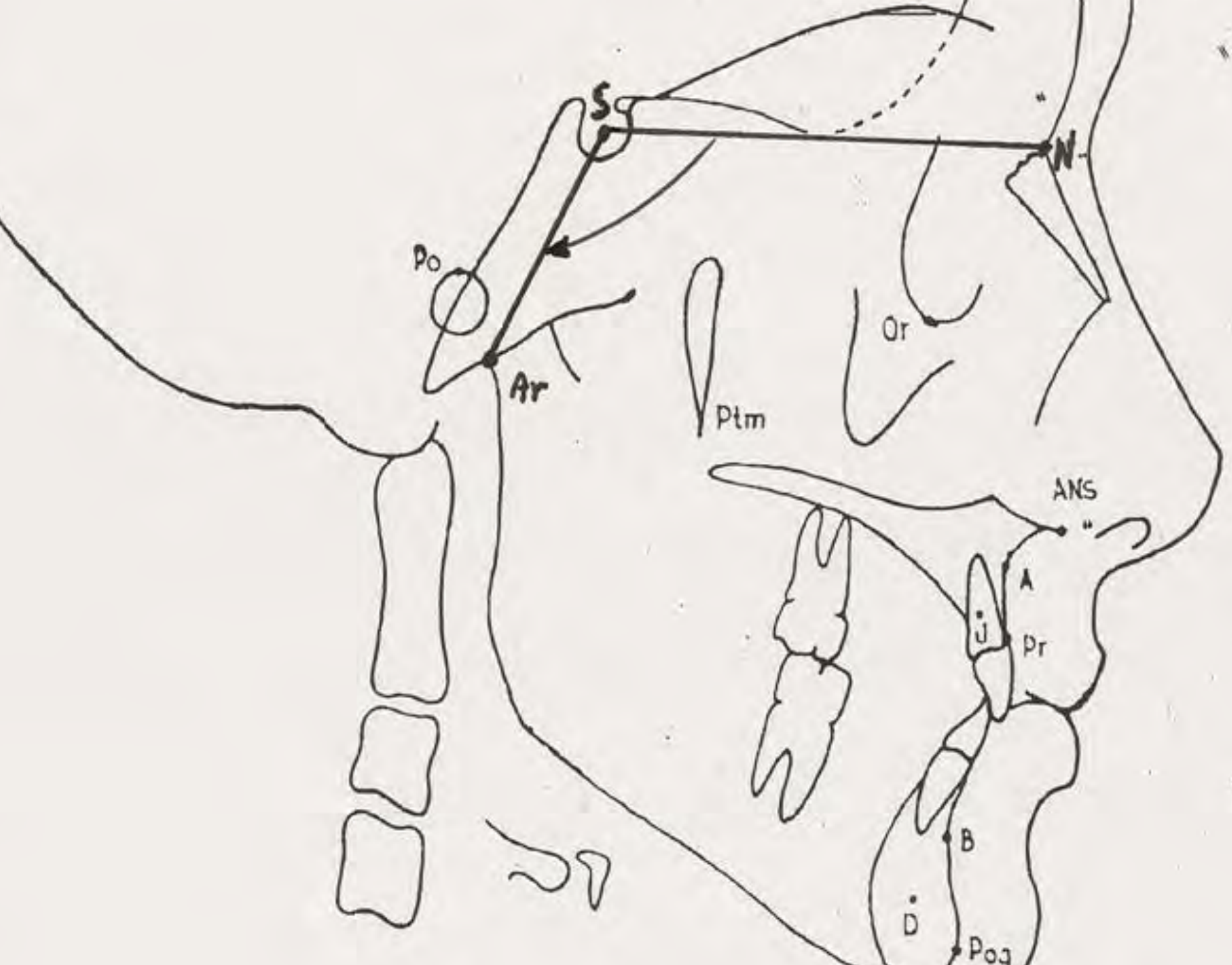
- NO, they are all visible on CBCT, not lateral cephs

So what correlations are seen on lateral ceph?

- Saddle Angle
- Facial Axis

Saddle Angle

- Nasion-Basion-Articulare
- Decrease in Saddle Angle (Forward and Down movement of the mandible) correlated with anterior-posterior airway dimension at C2 as well as airway roundness at C2 (became more elliptical)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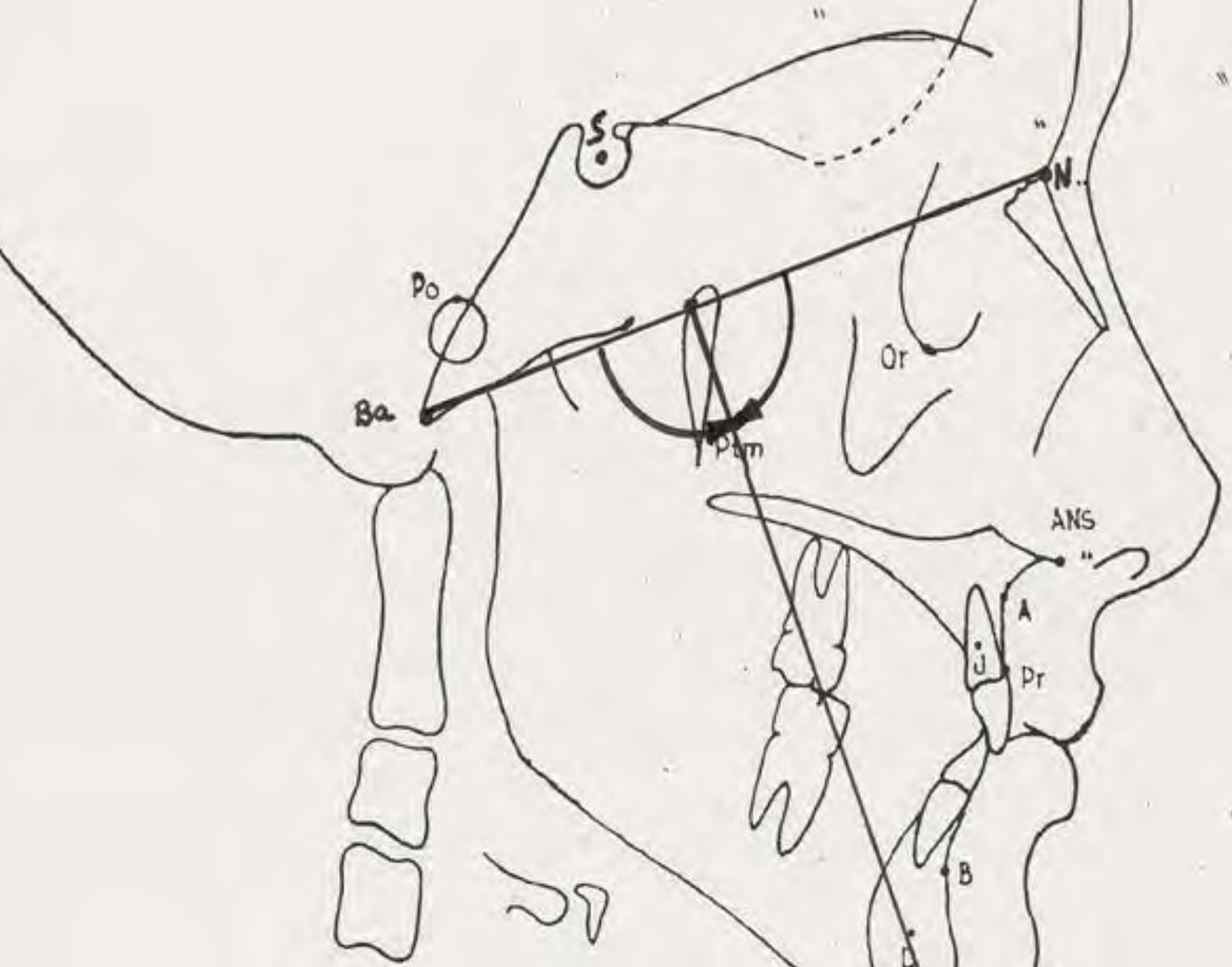
Facial Axis

- Angle between Nasion-Basion and Gnathion-Foramen Rotundum (pterygomaxillary point)
- Change towards normal (90 degrees) correlated with anterior-posterior airway dimension increase at C2 as well as airway roundness at C2 (more elliptical)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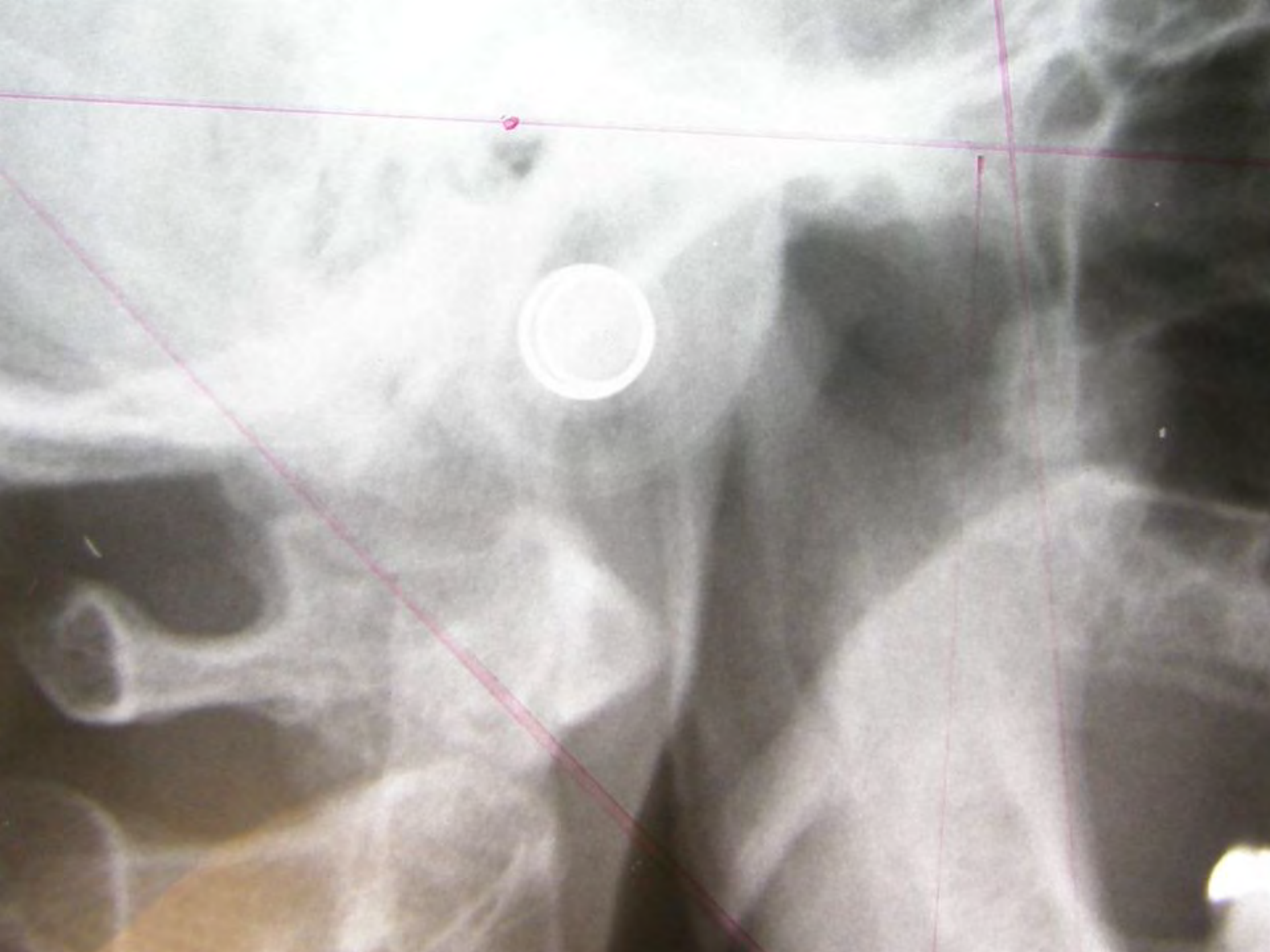


Additional Research

- Pharyngeal Volumetric Assessment with and without Sleep Apnea Oral Appliance
- Abstract presented at AADSM meeting 2013
- Done Supine
- Only two patients
- Average airway volume improvement of 27%
- Sresta, F et al Cleveland VA center

Lateral Cephalometric analysis and the risks of moderate to severe obstrucive sleep-disordered breathing in Thai patients

- Banhiran, W et al Mahidol University, Bankgok Thailand, 2012
- 188 adult patients (47 controls, 141 with OSA)
- Standardized radiographs analyzed for 10 linear and 5 angular parameters. Measured twice on separate occasions.
- There were statistically significant differences between controls and patients with AHI >15

- These were:
  - Mandibular Plane to Hyoid (MP-H) >18mm
  - Posterior airway space (PAS) <10mm
  - Skull base angle (NSBA) >130 degrees

Predictive?

- Only for risk of moderate-severe OSA
- No application for possible success of Oral Appliances to treat.

CBCT assessment of upper airway changes and treatment outcomes of OSA: a systematic review

- Alsufyami, NA Univ of Alberta, Edmonton, CA 2012
- After database search, seven articles met criteria
- Conclusion: The available published studies show evidence of CBCT measured anatomic changes with surgery and dental appliance treatment for OSA

Conclusion: Assessing Outcomes

- There is insufficient literature pertaining to the use of CBCT to assess treatment outcomes to reach a conclusion.

- What Do They Look Like?

Oral Appliances

- Tongue Retainers
- Off the Shelf Designs
- Custom Made Designs

Custom Made vs Off the Shelf

- “Comparison of a custom-made and a thermoplastic oral appliance for the treatment of mild sleep apnea”
- Vanderverken OM et al Amer J Respir Crit Care Med. 2008 Jul 15; 178(2): 197-202
- Objectives: “Our purpose was to compare the efficacy of both types [custom-made vs pre-fabricated] of devices in patients with SDB (Sleep Disordered Breathing)

Measurements and Results

- 35 patients (29 males, age 49 +/- 9; AHI 13 +/- 11; BMI 28 +/-4)
- Randomized cross-over trial, comprising 4 months treatment with a 1 month washout interval.
- Success rate higher with custom-made, (60 vs 31%; p=0.02)
- AHI reduced with only the custom-made (p=0.005)

Results

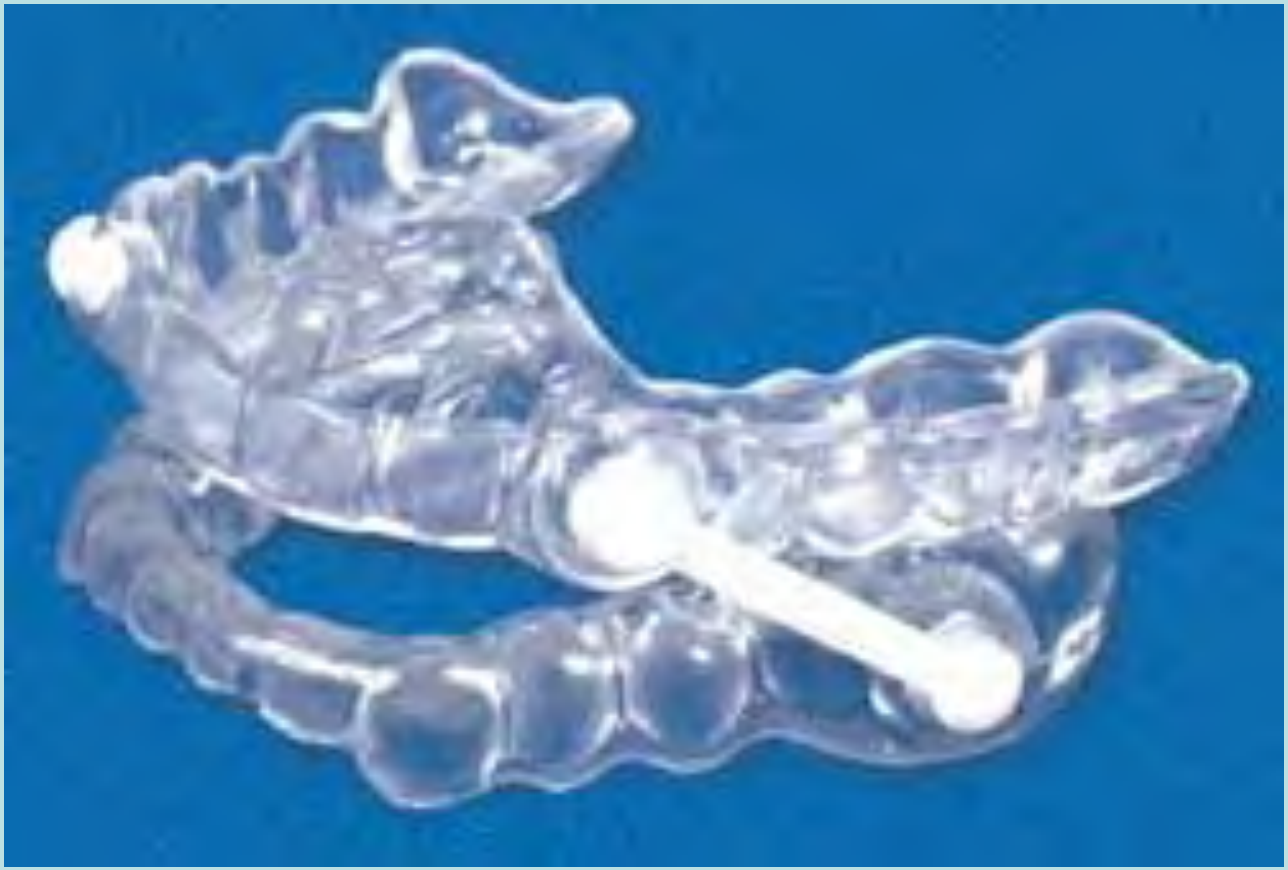
- One third of patients failed compliance with the thermoplastic, mainly due to insufficient retention.
- Total failure rate with the thermoplastic was 69%, whereas the majority (63%) of these were successfully treated with the custom-made device.
- At end of study, 82% of patients preferred the custom made, 9% no pref ($p=0.0001$)

Conclusions

- “In this study, a custom-made device turned out to be more effective than a thermoplastic device in the treatment of SDB.”
- “Our results suggest that the thermoplastic device cannot be recommended as a therapeutic option nor can it be used as a screening tool to find good candidates for mandibular advancement therapy.”

Custom Made Designs

Silent Nite



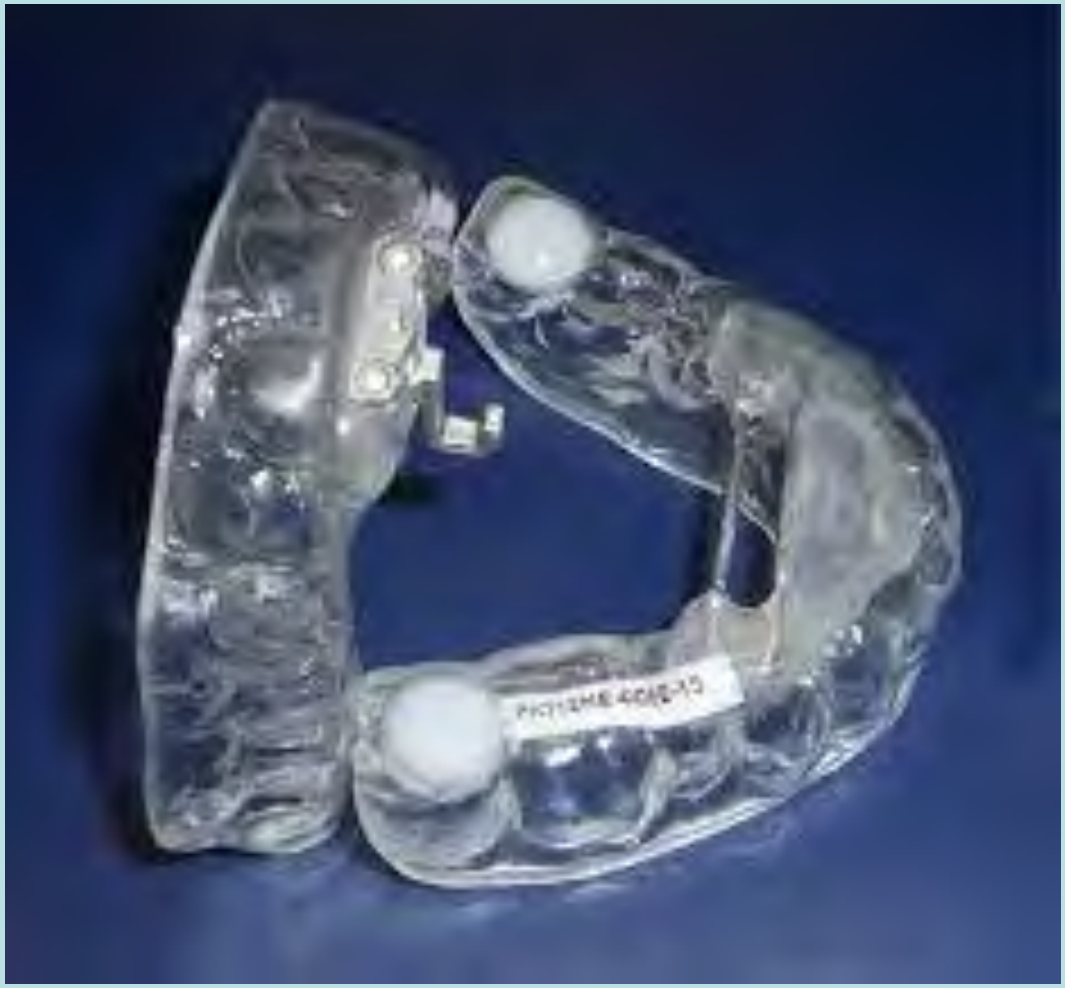
Silent Nite sl

Herbst Appliance

PM Positioner

TAP 3

TAP3 Medicare



Klearway


Klearway Oral Appliance
ACADEMY OF DENTAL SLEEP MEDICINE
© 2001, Academy of Dental Sleep Medicine

Klearway

SomnoMed

Edentulous SomnoMed

Dorsal Acrylic

Oral Appliance Selection Screener

- CPAP User?
- Backpacker/Camper/3rdWorld/Airline Travel?
- Phone Calls/Small Children Up at Night?
- Upper Molar Buccal Space Limited?
- Side Sleeper on Arm/Hand?
- Limited Number of Teeth?
- Very Large Tongue/Tongue Thrust?

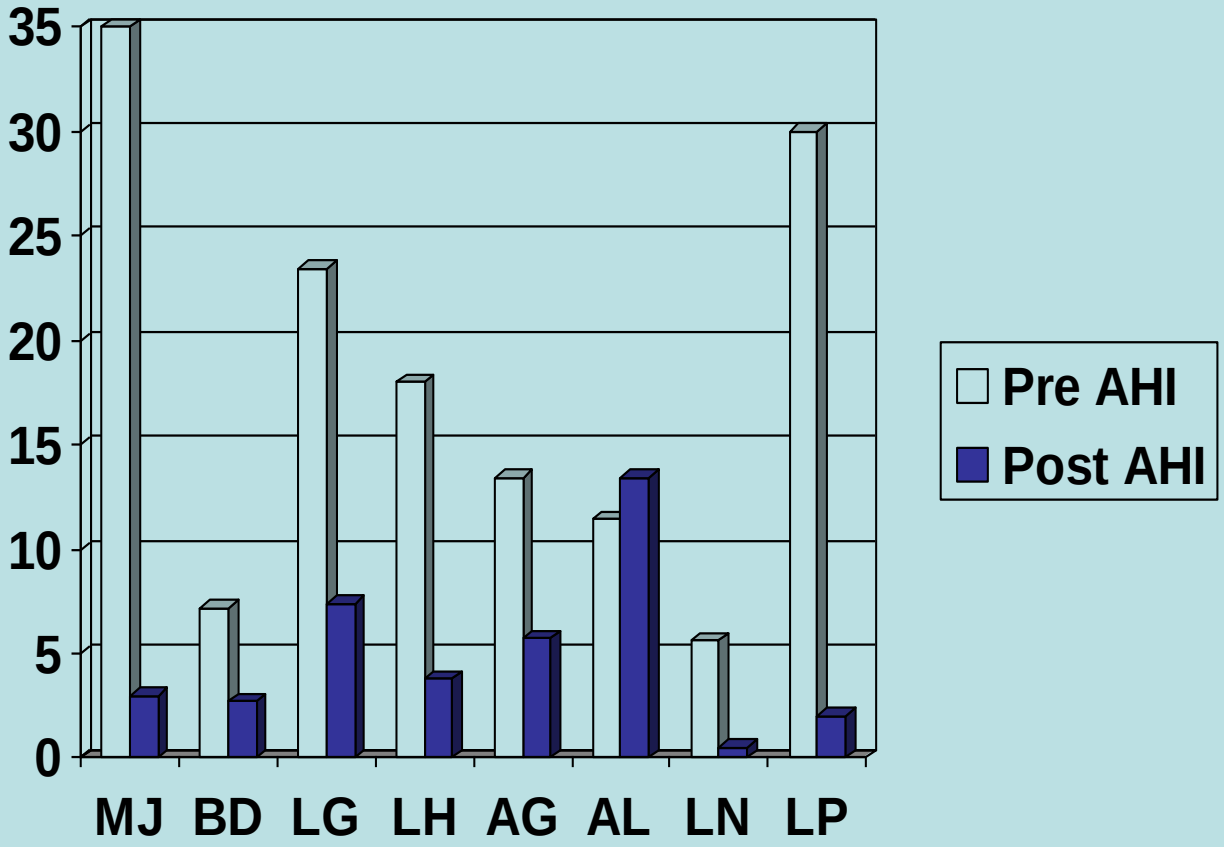
Selection Screener

- Known Allergy to Metals?
- High Incidence of Fever Blisters, Canker Sores, Apthous Ulcers?
- Patient Prior Use/Experience/Preference?

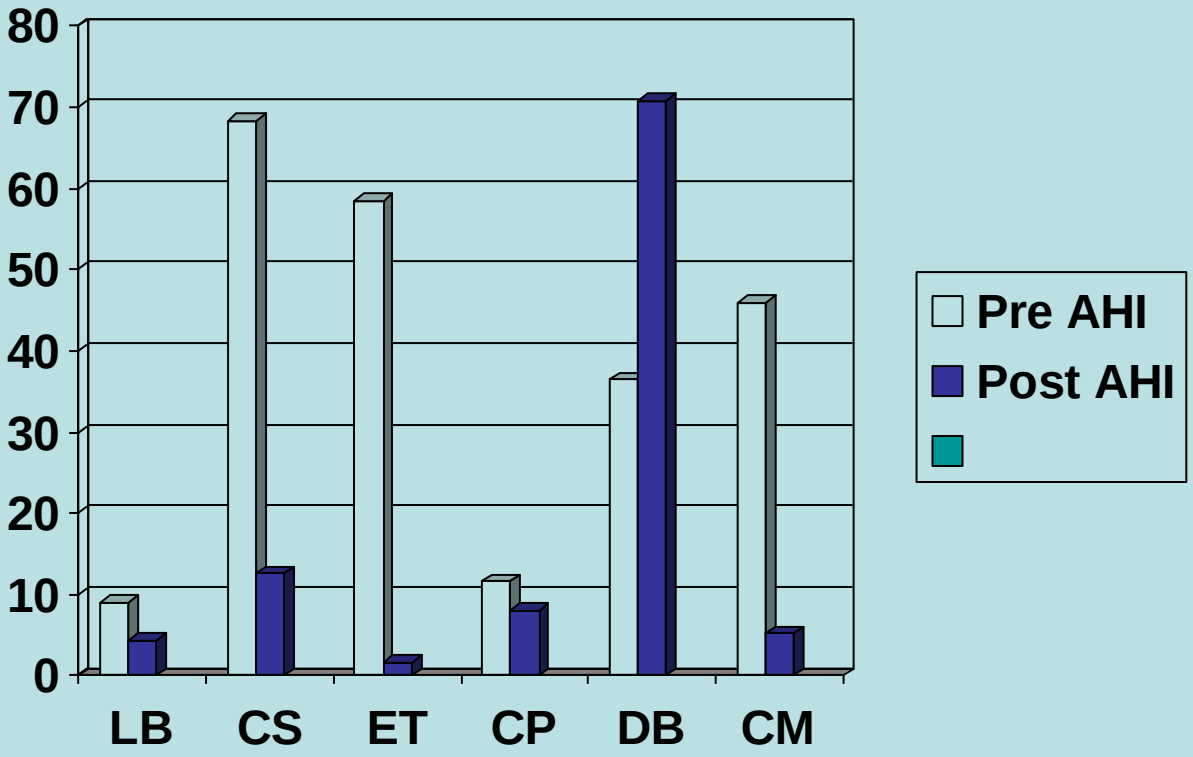
Results

- Overnight Sleep Study (PSG) using the Oral Appliance in Sleep Lab best
- Overnight Sleep Study using Home Sleep Test Device (minimum four leads) an alternative.

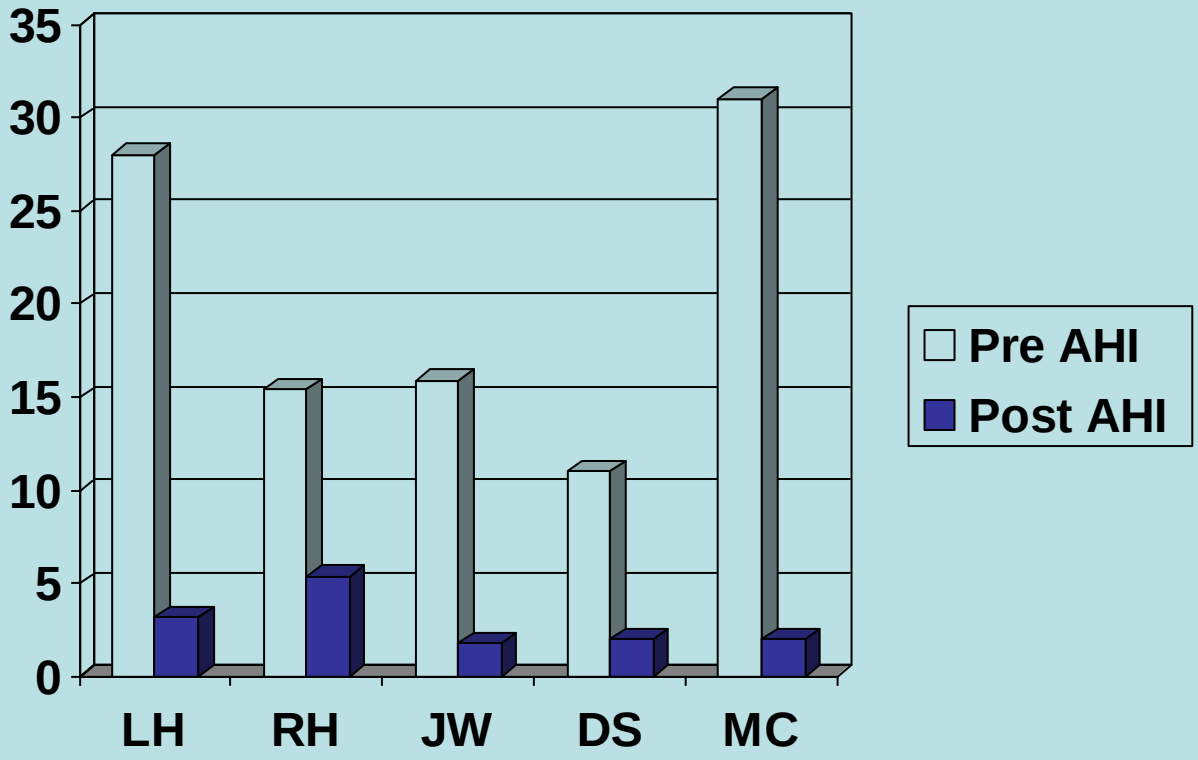
Apnea Hypopnea Index without and then with Oral Appliance



Apnea Hypopnea Index without and then with Oral Appliance



Apnea Hypopnea Index without and then with Oral Appliance



Side Effects

Short Term (Transitory) Side Effects

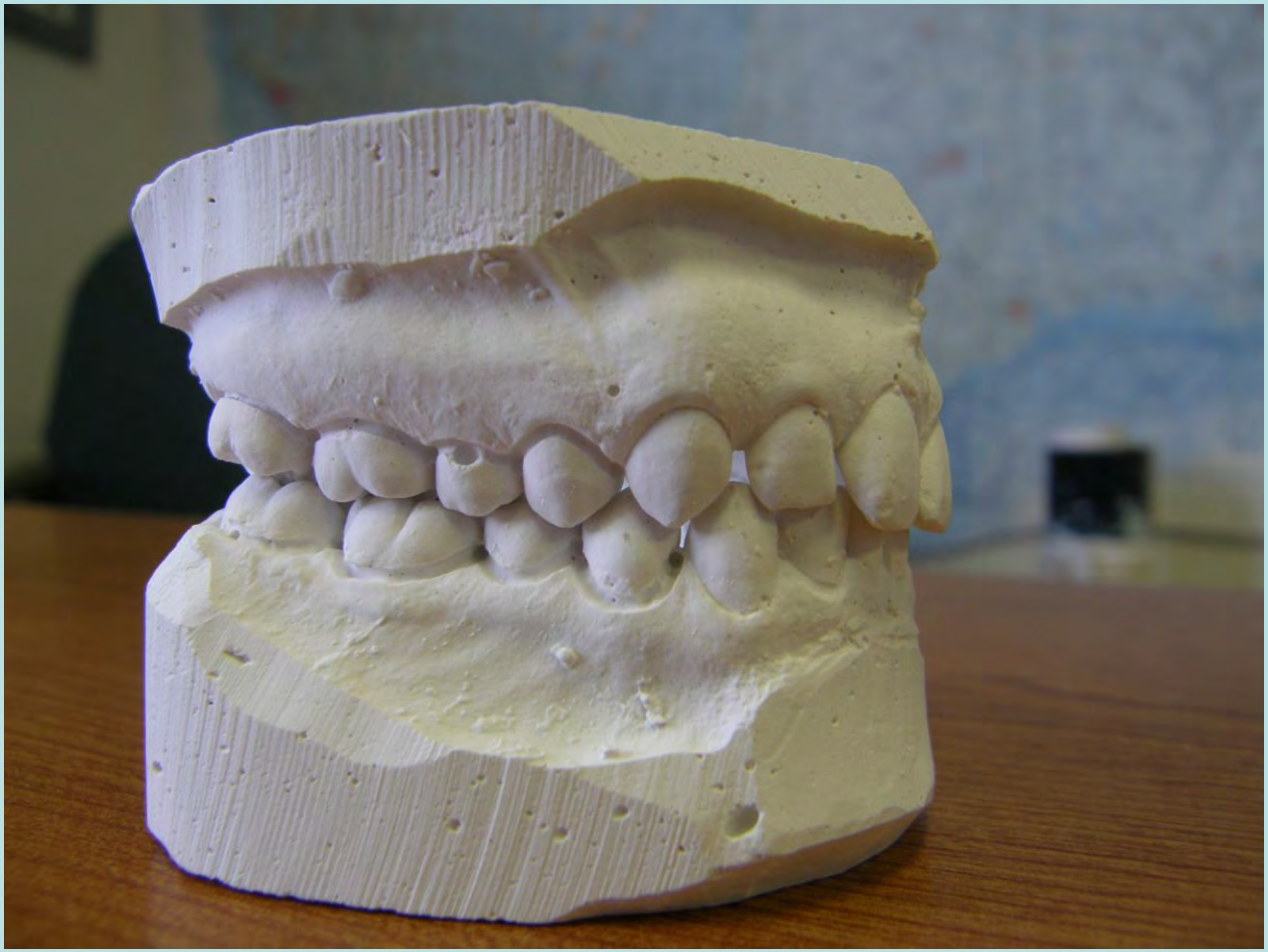
- Increased Saliva Flow
- Sore Muscles/Sore Teeth
- Altered Bite Feel

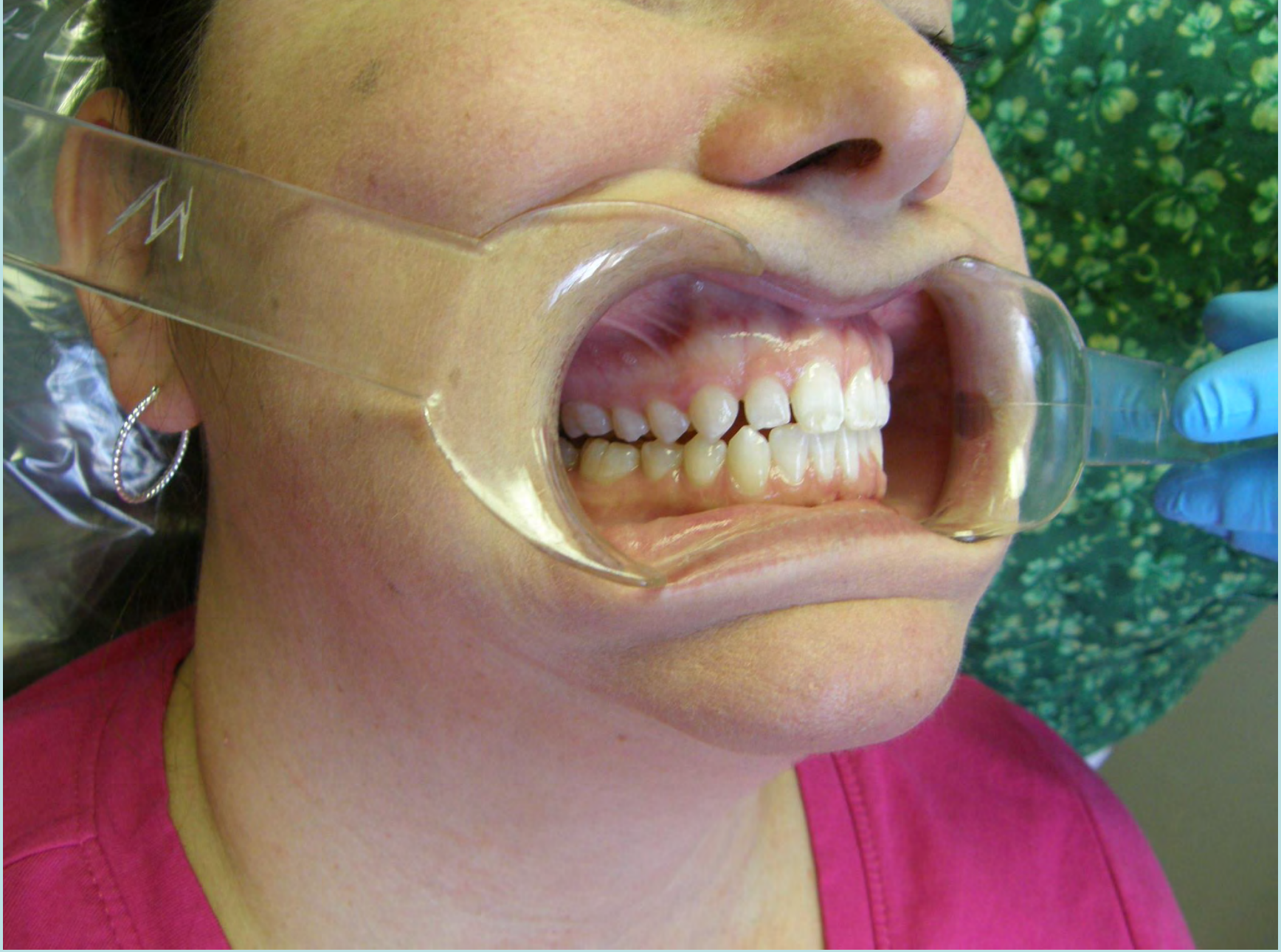
Long Term Side Effects

- “Long-term sequellae of oral appliance therapy in obstructive sleep apnea patients: Part 1. Cehpalometric Analysis”
- Drs Fernanda Almeida, Alan Lowe, et al
- Am J Orthodontics Dentofacial Orthopedics 2006; 129:195-204

Results

- Mean use period: 7.3 years
- “Changes observed in craniofacial structures were mainly related to significant tooth movements.”
- Decrease in Overbite 2.8 mm
- Decrease in Overjet 2.6mm
- Delayed onset of movement (2-3 years of use of the Oral Appliance)

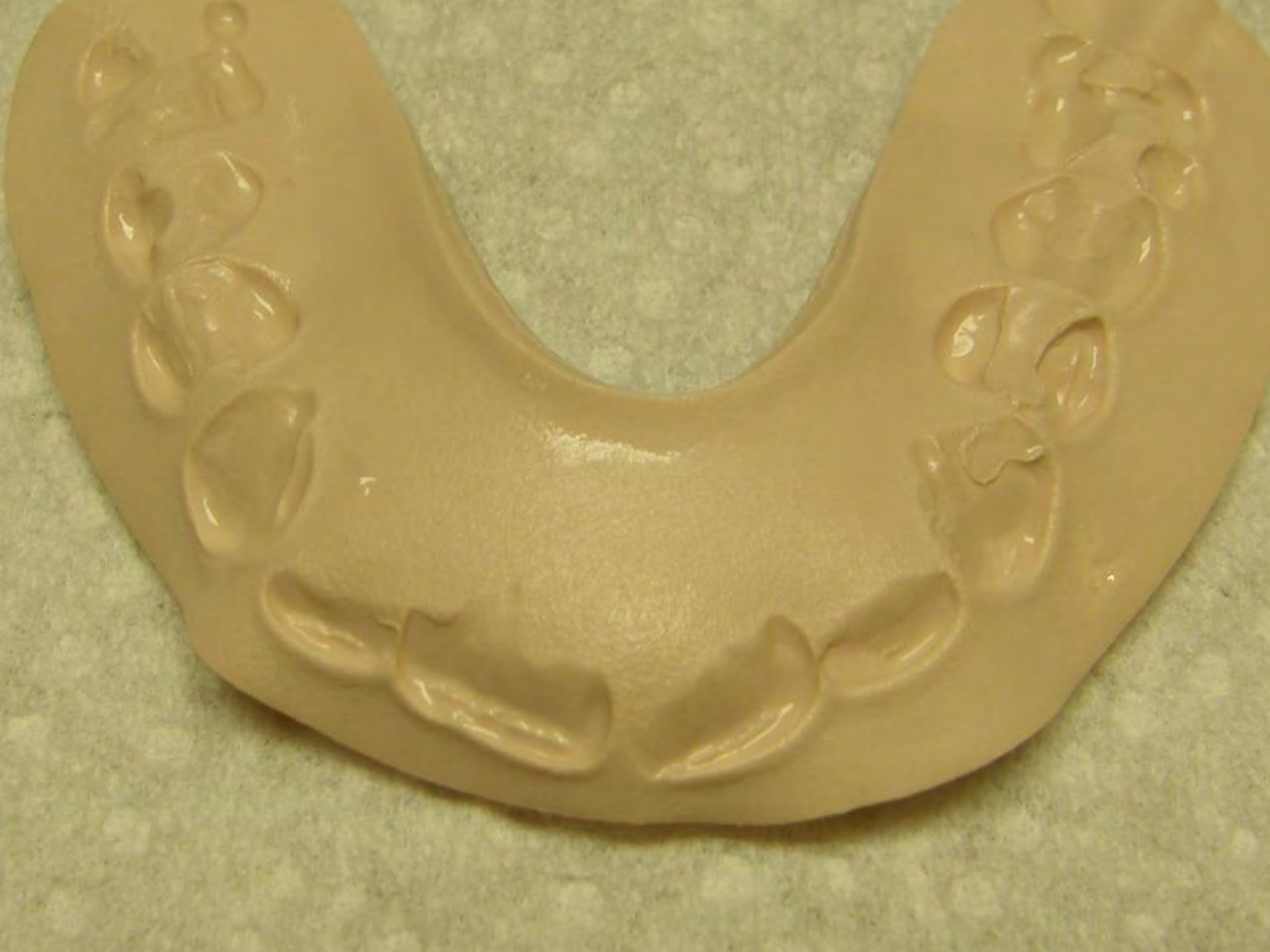




Bottom Line

- Mandibular Advancement Devices can move teeth.
- Delayed onset.
- If 2-3 years have gone by and bite starts to change, patient will weigh the benefits versus the side effect and make their own decision.
- Informed Consent.

AM Aligner



AM Aligner Directions

- Wait 30 minutes after removing the Oral Appliance
- Insert AM Aligner and press onto one arch
- Squeeze together
- May take 5-10 minutes

What about TMD?

- “The incidence and prevalence of (TMD) and posterior open bite (POB) in patients receiving mandibular advancement device (MAD) therapy for Obstructive Sleep Apnea” Sleep Breath. 2012 Apr4
- Perez CV, de Leeuw R, Okeson JP, Carlson CR, Li HF, Bush HM, Falace DA
- Orofacial Pain Center, UK

- 167 total patients. TMD assessed by questionnaire. POB assessed by clinical evaluation.
- Three intervals of time: baseline, 118 days, 208 days, and 413 days

- CONCLUSION: The use of MADs may lead to the development of TMD in a small number of patients. Nevertheless, these signs are most likely transient. Patients with pre-existing signs and symptoms of TMD do not experience significant exacerbation of those signs and symptoms with MAD use. Furthermore these may actually decrease over time. POB was found to develop in 17.9% of patients; however only 28.6% of these patients were aware of any bite changes.

What’s new?

Peppermint

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t feeling
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12.95

The "Third Wedding Ring": Stop Snoring Naturally with This Acupressure Ring

Simply slip this adjustable copper ring on your pinky prior to bedtime for a good night's sleep. Its magnetic block applies pressure to a spot on the finger that corresponds to the throat, keeping it open to eliminate or greatly reduce snoring.

SIZES: S(fits ring sizes 4-6½), M(6¾-9½), L-XL(9¾+)

No.51106 Stop Snoring Ring **$19.95**

An All-Natural Bath Soak for

But a group of liberal Democrats says the Penta-

right direction," but added: "Even today's Pentagon

WHAT'S NEXT: Lee and Reps. Barney Frank of Massachu-

request due to be unveiled Feb. 13.

HEALTH

Seeking new ways to battle sleep apnea

WHAT'S UP: The number of cases of obstructive sleep apnea — the condition that causes someone to stop breathing multiple times while sleeping — has risen 61 percent among veterans since 2008. With an estimated 20 percent of Veterans Affairs Department patients experiencing the problem, VA is exploring treatment options other than the uncomfortable but effective continuous positive airway pressure, or CPAP, masks that are commonly prescribed. In January, VA announced its pharmacies will start carrying Provent Sleep Apnea Therapy — nonmedicated discs that are stuck on a patient's nostrils to help him breathe easier.

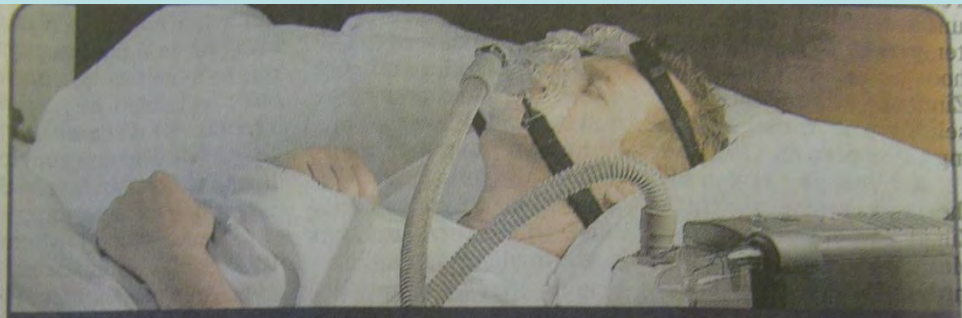
WHAT'S NEXT: Some patients find Provent to be an effective alternative to CPAP. In a release, retired Air Force Col. Win Reither said the discs were preferable to the noisy machines. "I tried the CPAP and it reminded me of the oxygen mask I wore in F-102 fighters," Reither said. "I didn't mind the bulky mask in the jet, but sleeping with one was a nightmare." CPAP is authorized for Tricare beneficiaries, but Provent, which requires a prescription, is not listed in the Tricare formulary. The military is pursuing alternatives to CPAP, which is commonly used by troops and requires electricity. Two studies at Walter Reed National Military Medical Center in Bethesda, Md., are exploring the efficacy of oral appliances — mouthpieces that keep the upper airway from collapsing — for military personnel.

PRNEWSFOTO/VENTUS MEDICAL

A patient sleeps with Provent Sleep Apnea Therapy discs, which will now be stocked in Veterans Affairs Department pharmacies.

PROVENT®

SLEEP APNEA THERAPY



Tired of Obstructive Sleep Apnea?

For millions of adults like you, **obstructive sleep apnea** (OSA) is a daily struggle, robbing you of the deep restful sleep you need to get through your day. Untreated OSA is also associated with an increased risk of death and serious health conditions, including high blood pressure, coronary artery disease, diabetes, and stroke.

Right now, sleep specialists at **Kentucky Research Group in Louisville** are conducting a research study of an investigational device for obstructive sleep apnea that may help. If you have OSA, and haven't had lasting success with CPAP or other treatments, this study may be right for you.

Take *the* Next Step

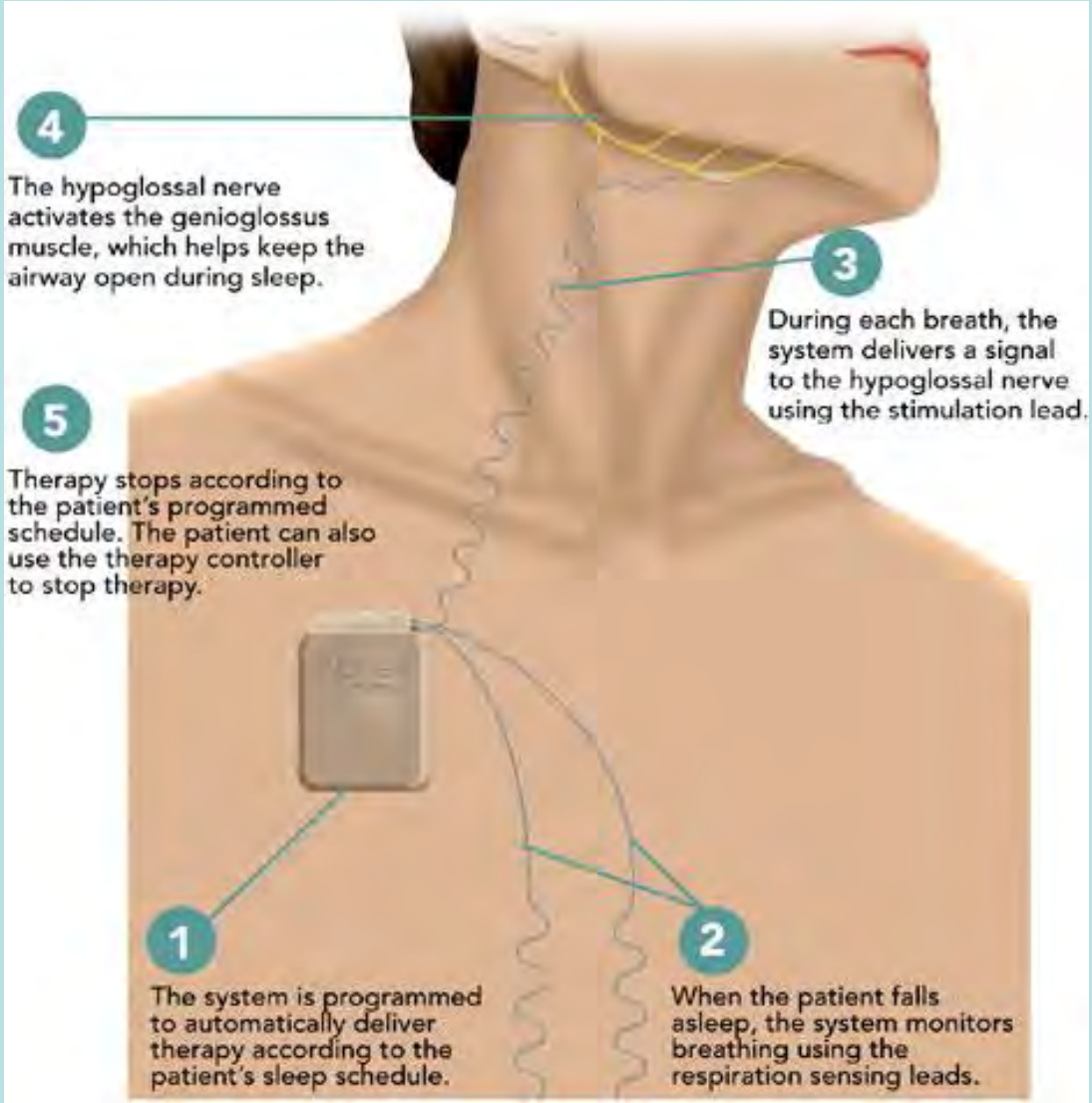
Space is limited. To see if this study may be right for you, call **1-888-975-3370** or visit **www.SleepApneaTrial.com**

Narval Oral Appliance by Res Med

Narval Charachteristics

- Covers posterior teeth only
- Jaw position adjusts by changing arms
- Requires good dexterity for both insertion/removal and changing arms

Hypoglossal Nerve Stimulator



HGNS Clinical Trials

- One site was here (Kentucky Research Group)
- Trial was successful: 14 of 15 moderate to severe OSA patients were “essentially cured”
- FDA wanted more trials
- Company declined to continue
- (Verbal communication, 23 Feb 2014)

HGNS Clinical Trials

- Other arm of Trials: HGNS unit from Inspire Medical
- FDA approved as of 23 Feb 2014

- (Verbal Communication, 24 Feb 2014, Dr David Winslow, Ky Research Group)

Weight Loss Meds for the treatment of OSA??

- Yes, they do exist.
- Research: 45 subjects with moderate to severe untreated OSA and BMI 30-40
- Subjects randomized to receive placebo (n=23) or phentiramine 15mg plus extended release topiramate 92mg (n=22)
- 2 week screening and 28 week treatment
- PSG's at baseline, week 8 and week 28

Results

- Favored the phentermine group
- AHI decreased -31.5 vs -16.6 (p=0.0084)
- Weight loss -10.2% vs 4.3% (p=0.0006)
- Positive (p=0.0003) correlation between weight loss and decrease in AHI
- Med well tolerated, few adverse effects
- Winslow, DH, et al Sleep 2012;35(11) 1529-1539

Prediction by Researcher

- In 10 years, there will be ten different effective, well tolerated weight loss meds
- The primary treatment for OSA will become weight loss and an Oral Appliance to treat residual OSA.
- Further, he suggests all PCP be rewarded (with $$) for patient weight loss and that doing so will eliminate 50% of heath needs.

Will That Happen??

- Biggest obstacle is Resistance to Change
- By everyone involved (except maybe us!)

INTRODUCTION TO DENTAL SLEEP MEDICINE

John M. McCrillis DMD,DABDSM

Karen R. Fox EDDA, Judy Doll

Louisville Dental Sleep Medicine

www.louisvilledentalsleepmedicine.com

OVERVIEW

- OUR PROGRAM IS DESIGNED TO GIVE YOUR OFFICE A STEP BY STEP GUIDE FOR A SUCCESSFUL DENTAL SLEEP MEDICINE PRACTICE.

HOW DO YOU GET STARTED?

- **The quickest and most effective way to incorporate dental sleep medicine into a general dental practice is to start with the right team.**
- **Which includes the Doctor, Patient Coordinator, Assistants and Insurance Coordinator.**

Patient Coordinator

- RECEIVES NEW PATIENT CALLS EITHER FROM REFERRING DOCTORS OR THE PATIENTS THEMSELVES.
- COLLECT PATIENT INFORMATION.
- GIVE OVERVIEW OF PRACTICE AND FINANCIAL POLICIES.
- MAKE INITIAL APPOINTMENT.
- OBTAIN SLEEP STUDIES.
- CHECK INSURANCE BENEFITS.
- PRESENT TREATMENT PLAN, INSURANCE ESTIMATES AND FINANCIAL RESPONSIBILITY OF THE PATIENT.

COLLECTING PATIENT INFORMATION

Telephone Log

- NAME_____DATE_____
- APPOINTMENT DATE AND TIME_____
- ADDRESS_____
- DOB_____
- HOME PHONE_____
- WORK PHONE_____CELL PHONE_____
- SOCIAL SECURITY NUMBER_____
- REFERRED BY_____

Medical Insurance Information

- INSURANCE COMPANY_____
- PHONE_____
- MEMBER NAME_____
- DATE OF BIRTH_____
- EMPLOYED BY

- **WHEN THE PATIENTCOMES IN FOR THEIR APPOINTMENT HAVE THEM BRING THE NAME AND ADDRESS OF ALL OF THEIR DOCTORS, A LIST OF ALL CURRENT MEDICATION THEY ARE TAKING, A COPY OF THEIR INSURANCE CARD AND SOCIAL SECURITY CARD OR A PICTURE ID.**

Financial Information

- The initial appointment is _$___ and will take approximately 60 minutes. At that appointment you will be able to talk with the Doctor concerning Oral Appliances and how they work. The Doctor will go over your sleep study concerning the use of an Oral Appliance.
- Then the patient coordinator will go over the insurance information we have. This will help the patient make an informed

Making The Initial Appointment

- OUR SUGGESTION IS TO MAKE A CONSULTATION APPOINTMENT FIRST. THIS APPOINTMENT SHOULD BE SIXTY MINUTES. THE FIRST THIRTY MINUTES SHOULD BE THE DOCTOR AND PATIENT, AT THIS TIME THE DOCTOR WILL GATHER THE HISTORY AND PHYSICAL OF THE PATIENT, DISCUSS THEIR SLEEP STUDY RESULTS AND THE POSSIBLE TREATMENT WITH ORAL APPLIANCE THERAPY.

- PROVIDING THE PATIENT FINANCIAL INFORMATION AND WHAT THEY SHOULD EXPECT TO BE REIMBURSED BY THEIR

Obtaining Sleep Study Information

- ONCE YOU HAVE ESTABLISHED, ON THE PHONE THAT THE PATIENT HAS SLEEP APNEA YOU NEED TO DETERMINE WHERE THE PATIENT HAD THEIR SLEEP STUDY DONE.
- THIS IS NOT ALWAYS EASY BECAUSE YOUR PATIENT MAY NOT REMEMBER THE NAME OF THE SLEEP CENTER.
- SO YOU NEED TO BE AWARE OF WHERE YOUR LOCAL SLEEP CENTERS ARE SO YOU CAN HELP THE PATIENT REMEMBER

Calling The Sleep Center

- WHEN YOU CALL YOUR LOCAL SLEEP CENTERS IDENTIFY YOURSELF. BE SURE TO WRITE DOWN THE PERSON'S NAME YOU ARE TALKING WITH. YOU MAY NEED TO CONTACT THE PERSON IN THE FUTURE. EXPLAIN WHO YOU ARE AND THAT YOU ARE REQUESTING A COPY OF THE PATIENT'S SLEEP STUDY AND CPAP TRITATION. MAKE SURE YOU HAVE THE PATIENTS NAME, DATE OF BIRTH, AND IF POSSIBLE THE SOCIAL SECURITY NUMBER

CHECKING INSURANCE BENEFITS

When May Benefits Be Checked?

- While office practices vary, HIPAA guidelines suggest the individual needs to be a PATIENT OF RECORD before checking their insurance benefits.

- This also avoids spending many hours checking benefits without ever having the chance to meet the patient.

WHAT INFORMATION DO I NEED TO CHECK BENEFITS?

Medical Insurance Information

- INSURANCE COMPANY_____
- PHONE_____
- MEMBER NAME_____
- DATE OF BIRTH_____
- MEMBER ID_____
- EMPLOYED BY_____
- GROUP NUMBER_____

WHAT QUESTIONS DO I ASK THE INSURANCE COMPANY REGARDING BENEFITS ?

INSURANCE BREAKDOWN

TAX ID DIAGNOSIS CODE 327.23 CODES 99214 ,70350 , 70355 & E0486

Date_____ Spoke with_____
Effective date_____
Does this plan have out of network benefits? _____
Office visit co-pays for in network benefits_____
At what % are benefits paid for exams and x-rays for in network _____
For out of network _____
At what % are benefits paid for DME for in network _____For out of network _____
What is the deductible for in network_____ for out of network _____?
Has any of the deductible been met for in _____ for out _____?
What is the DME deductible for in network _____for out _____?
Has any of the DME deductible been met for in network _____for out_____?

Out of pocket limits for in network_____ for out_____
Has any Out of Pocket been met for in _____for out_____?

Do All Insurance Companies Require Pre-Authorizations?

- NOT ALL INSURANCE COMPANIES REQUIRE PRE-AUTHORIZATIONS. SOME INSURANCE COMPANIES ADVISE YOU TO DO WHAT THEY CALL A PRE-DETERMINATION
- A PRE-DETERMINATION IS NOT REQUIRED. THIS WILL ONLY TELL THE PATIENT IF IT IS A COVERED BENEFIT

What Insurance Companies Require Pre-Authorizations?

HUMANA ALWAYS REQUIRES PRE-AUTHORIZATION ON DURABLE MEDICAL EQUIPEMENT OVER $750.00.

SOME UNITEDHEALTHCARE, ANTHEM AND AETNA PLANS REQUEST YOU TO PRE-AUTHORIZE DURABLE MEDICAL EQUIPMENT

THE ONLY SURE WAY OF KNOWING IS TO

What Questions Should I Ask The Insurance Company Regarding Pre-Authorizations?

- Is pre-authorization required for Oral Appliance _____?
- Pre –authorization phone number _____
- Is there a direct exclusion for Oral Appliance Therapy _____?
- What information do you need to process

HOW DO I LET MY PATIENT KNOW WHAT THEIR INSURANCE COMPANY WILL PAY FOR?

Insurance Estimate

- DURING THE INITIAL CONSULTATION THE PATIENT IS PROVIDED WITH AN INSURANCE BENEFIT ESTIMATE OF THEIR COVERAGE PROVIDED BY THEIR MEDICAL INSURANCE COMPANY.
- THE PATIENT IS ALSO PROVIDED WITH THEIR FINANCIAL RESPONSIBILITY FOR TREATMENT.

Involve the Patient in the Claims Process

- Approximately 55% of the population is covered under managed care plans which encourage or mandate the use of specific providers. Your practice could become a special provider if the plan does not have a provider in the network who can provide the type of care that the patient requires. In order for your practice to evolve and grow, you may wish to assist the patient in evaluating their policies and benefits. Semantics can be important here. Tell the patient you are evaluating the “limitations” of their policy. This places the ownership of the policy with the patient. Not all insurance contracts are created equal and limitations

Out of Network Insurance Benefits Estimate

- **THIS IS NOT A GUARANTEE OF BENEFITS. THIS IS AN ESTIMATE ONLY.**
- **BASED ON THE INFORMATION MADE AVAILABLE TO US BY YOU AND**
- **YOUR INSURANCE COMPANY._____**

- **CONSULT_____ _____**

- **EXAM_____ _____**

- **X-RAYS_____ _____**

- **APPLIANCE_____ _____**

- **YOUR DEDUCTIBLE _____HAVE MET_____**

In Network Insurance Benefits Estimate

- **THIS IS NOT A GUARANTEE OF BENEFITS. THIS IS AN ESTIMATE ONLY.**
- **BASED ON THE INFORMATION MADE AVAILABLE TO US BY YOU AND**
- **YOUR INSURANCE COMPANY._____**

- **CONSULT_____ _____**

- **EXAM_____ _____**

- **X-RAYS_____ _____**

- **APPLIANCE_____ _____**

- **YOUR DEDUCTIBLE _____HAVE MET_____**

Treatment Presentation

- THE MOST IMPORTANT PART OF THE PATIENT COORDINATOR'S JOB IS TO **SELL THE TREATMENT.** YOU HAVE TO CONVINCE THE PATIENT THEY NEED THIS TREATMENT **BUT DO NOT PRESSURE THEM.** A POSITIVE ATTITUDE IS VITAL IN CLOSING THE SALE. IF YOU APPROACH A POTENTIAL PATIENT WITH A NEGATIVE ATTITUDE, YOU MIGHT AS WELL PACK UP AND GO HOME.
- GIVE THE PATIENT THE INSURANCE INFORMATION AND EXPLAIN PAYMENT OPTIONS FOR TREATMENT.
- EXPLAIN IF A PRE-ATHORZIATION IS NEEDED.
- KNOW WHAT THEY WANT AND NEED! CLOSING IS THE PROCESS OF HELPING PEOPLE MAKING DECISIONS THAT ARE GOOD FOR THEM.
- FOLLOW THESE SIMPLE STEPS AND YOU WILL BE SUCCESSFULLY CLOSING THE SALE AND CREATING

Responsibility

- THE PATIENT is ultimately responsible for the cost of their treatment.
- “We are committed to you and your treatment. Payment of your bill is part of your treatment.”
- Have a printed, signed Financial Agreement, Insurance Estimate and Informed Consent.

TREATING THE PATIENT

Scheduling The Full Exam

- THIS APPOINTMENT SHOULD BE AN HOUR AND A HALF.
- FIRST THE ASSISTANT SHOULD TAKE THE PANORAMIC AND THE CEPHALOGRAM.
- AFTER THE DOCTOR FINISHES THE EVALUATION, DIGITAL PICTURES AND BITE REGISTRATION ARE TAKEN.
- THEN IMPRESSIONS ARE TAKEN OF THE PATIENT. THESE NEED TO BE VERY GOOD IMPRESSIONS. YOU NEED FULL EXTENSION OF ALL BORDERS AND TEETH.
- AFTER POURING UP THE IMPRESSION THE

Delivering The Appliance And Scheduling All Follow Up Appointments

- THE DELIVERY APPOINTMENT SHOULD BE FORTY MINUTES.
- THE PAITENT SHOULD BE SEEN IN TWO WEEKS FOR THEIR FIRST FOLLOW UP.
- THE SECOND FOLLOW UP IS USUALLY SIX WEEKS LATER.
- THE THIRD FOLLOW UP IS SIX TO EIGHT WEEKS AFTER THE SECOND FOLLOW UP. AT THIS TIME SOME FORM OF TESTING SHOULD BE DONE TO PROVE THE EFFECTIVENESS OF THE APPLIANCE.
- IF THE DOCTOR FEELS THE PATIENT IS DOING WELL THE PATIENT WILL BE PUT ON A SIX MONTH APPOINTMENT.

Insurance Coordinator

- NEED TO HAVE AN UNDERSTANDING OF MEDICAL INSURANCE.
- BE ABLE TO REVIEW PATIENT'S MEDICAL INSURANCE POLICY FOR BENEFITS, GUIDELINES FOR TREATMENT, EXCLUSIONS,

  PRE-AUTHORIZATION NEEDS AND CODES FOR FILING CLAIMS USED FOR EACH SPECIFIC INSURANCE COMPANY.
- OBTAIN PRE-AUTHORIZATIONS
- FILE PAPER CLAIMS
- FILE ELECTRONIC CLAIMS
- FILE MEDICARE CLAIMS

MEDICAL INSURANCE

Does Medical Insurance Pay For Oral Appliances?

- YES , MOST INSURANCE COMPANIES PAY FOR CUSTOM-FITTED ORAL APPLIANCES PLACED BY DENTISTS TO TREAT OBSTRUCTIVE SLEEP APNEA(OSA). IT IS COMMON FOR MEDICAL CARRIERS TO REQUIRE A COPY OF THE PATIENT'S SLEEP STUDY(e.g., NOCTURNAL POLYSOMNOGRAPH) AND OR A PHYSICIAN REFERRAL.
- NOTE THAT PREFRABRICATED

Who Qualifies for Oral Appliance Therapy?

- Only people diagnosed with Obstructive sleep apnea, (ICD. 9 327. 23 or 780.53) by a physician will be covered for payment by their medical insurance. Most insurance companies have a medical policy guideline for their claims adjusters to follow when processing the claim. This policy guideline will list what codes they will accept for payment of oral appliance therapy.

Qualifiers for Coverage

- MUST have a diagnosis of Obstructive sleep apnea by a physician
- MUST meet criteria established by the insurer
  - Example: Apnea Hypopnea Index (AHI) 15 or greater or:
  - AHI 5-15 with an Epworth scale of at least 10 or more and a co-morbidity (such as hypertension)

Benefits Paid To?

- In Network
  - Patient pays deductibles and co-pays
  - Insurance benefits paid to provider
- Out of Network
  - Patient pays deductibles and co-pays
  - Insurance benefits paid to patient

In or Out of Network

- Unless you specifically sign up, you are **OUT** of network.
- Even when out of network, the patient may be able to get in network benefits.
  - If there is no corresponding in network provider
  - If the referring physician is in network and refers specifically to you for the treatment.

WHAT INFORMATION DO I NEED TO CHECK BENEFITS?