

Sleep Apnea in Dentistry

Dental Sleep Medicine

ACLM 56th Annual Meeting: 



ACLM 56th Annual Meeting: 



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Oral Appliance



Dorsal



TAP



Herbst



Narval

Why?

- 75% adult population have one sleep Sx.
- 60% population have driven Drowsy past year
- 20% all auto accidents related
- \$16 Billions direct costs
- \$50- \$100 Billion indirect costs
- 2/3 adults snore
- New federal guidelines transportation industry
- 23% of spouses sleep in separate rooms

Sleep Disorders include

- Primary snoring
- High upper airway resistance syndrome (HUARS)
- Insomnia
- Obstructive sleep apnea
- Insomnia with sleep apnea
- Central sleep apnea
- Sleep bruxism
- Parasomnias
- Respiratory effort related arousals (RERAs)
- Periodic limb movement
- Narcolepsy

Sleep Dentistry

- The management of Sleep--disordered breathing (OSA, Snoring) Utilizing oral appliances and/or surgical techniques.
- Involves: Screening, Selection, Fabrication, Fitting, Titration and long-term follow-up for OA's

Definitions

- OAT - Oral Appliance Therapy
- OSA – Obstructive Sleep Apnea
- CSA - Central Sleep Apnea
- AHI - Apnea Hypopoxea Index
- RERA – Respiratory Effort Related Arousals
- RDI - Respiratory Distress Index
- RDI= RERA's + AHI per hour
- PSG - Polysomnography

Definitions

- HST – Home Sleep Test
- CPAP - Continuous Positive Airway Pressure
- MRA - Mandibular Re positioning Appliance
- OCST or OSCT – Ot of Sleep Center Test

Jurisprudence

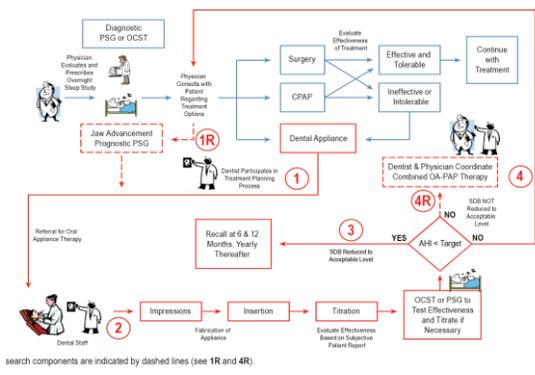
- Medical Protocol
- Standard of Care
- Scope of licensure
- Record Keeping
- Informed consent

Medical Protocol

- Dx must be made by a Physician
- “Gold Standard” PSG
- Need not be made by Sleep Specialist
- “HST” coming into vogue



Figure 1—Schematic diagram of the proposed care-under-one-roof model for integrating dental sleep medicine and sleep medicine within the university-based sleep disorders center



Standard of Care

- Licensed to perform a procedure does not insulate the practitioner liability for negligent care.
- Professional that diagnoses or treats has a duty to do so within a medically appropriate level of care.
- Practitioners can be found in violation of standard of care if they fail to refer to appropriate specialists.

Standard

- Dentists must realize a Dx based on physical observation and patient interview alone does not satisfy the standard of care.
- Dx of OSA must be made by a physician based on results of PSG or other objective tests.
- Physicians must be aware they are not qualified to fabricate or manage appliances, potential tooth movements, or TMJ, and occlusal alterations.

Standard Summary

- *Diagnosis* generally appears to fall under realm of medicine while *management* of oral appliances fall under dentistry.
- Scope of licensure and standard of care are evolving.
- Stay current with state law.

Scope of licensure

- State Practice Acts:
Dental and Medical Boards
- Telemedicine issues
- Liability coverage
- Insurance

ADA Definition of Dentistry

- “Dentistry means the evaluation, diagnosis, prevention or treatment of diseases, disorders or conditions of the oral cavity, maxillofacial area and associated structures and their impact on the Human body... provided by the dentist, within the scope of his or her education, training and experience in accordance with the ethics of the professional and applicable law...”

Scope

- The fabrication, fitting and adjusting of oral applications is allowed within the practice of dentistry

The *diagnosis* of OSA generally is not at this point in time.

Scope

- Dentists must realize a *diagnosis* of OSA (presence or absence) must precede fabrication or utilization of OAT.
- When a dentist treats “*snoring*” without a definitive *medical diagnosis*, the dentist creates significant legal exposure for him/herself in most states.

Record Keeping

- Intra/extra oral FMX
- Ceph / Dx Models
- Photos intra oral, full face, profile etc.
- Clinical charting
- Periodontal chart
- TMJ exam
- Rx from physician
- Tx Plan

Informed Consent

BARN Consent

- Benefits
- Alternatives
- Risks
- Nothing

ADA Guidelines

- “The dentist should inform the patient of the proposed treatment and any reasonable alternatives in a manner that allows the patient to become involved in a treatment decision.”

Attorney will say

- “Patients have the right to make informed choices regarding their treatment... ..and failing to provide patients with relevant information is malpractice if an unfavorable outcome should occur and the patient was not informed of the possibility in advance.”

Key Points of Consent

- Description of procedure – including background
- List of inherent risks
- Alternative treatments
- Wording attesting that the patient understands the risks and has had the opportunity to discuss with the doctor
- Signature, date

Informed Consent

- Morning TMJ Pain
- Tinnitus
- Tongue Pain
- Sore Cheeks
- Drooling/Excessive Salivation
- Dry Mouth
- Allergy
- Periodontal Bone Loss
- Tooth Mobility
- Vivid Dreams
- Feelings of Suffocation
- Anxiety
- Occlusal changes
- Open Contacts
- Difficulty Swallowing
- Changes in Speech
- Gagging
- Clenching and Grinding
- Appliance breakage
- Appliance Odors

- Loosened Crowns or Restorations
- Loss of TRD Suction or Retention
- Appliance Retention
- Increase in AHI/RDI at Follow-Up Polysomnogram (PSG)
- Residual Sleepiness
- Unmet/ Unrealistic Expectations

Current Guidelines AASM & AADSM 2015

- recommend that sleep physicians prescribe oral appliances, rather than no therapy, for adult patients who request treatment of primary snoring (without obstructive sleep apnea). (STANDARD)
- recommend that sleep physicians consider prescription of oral appliances, rather than no treatment, for adult patients with obstructive sleep apnea who are intolerant of CPAP therapy or prefer alternate therapy. (STANDARD)
- oral appliance therapy is prescribed by a sleep physician for an adult patient with obstructive sleep apnea, a qualified dentist use a custom, titratable appliance over non-custom oral devices. (GUIDELINE)
- qualified dentists provide oversight—rather than no follow-up—of oral appliance therapy in adult patients with obstructive sleep apnea, to survey for dental-related side effects or occlusal changes and reduce their incidence. (GUIDELINE)
- sleep physicians conduct follow-up sleep testing to improve or confirm treatment efficacy, rather than conduct follow-up without sleep testing, for patients fitted with oral appliances. (GUIDELINE)

“Qualified dentist”

This guideline refers to a “qualified dentist” as the dental provider of choice to provide OAT. The successful delivery of oral appliances requires technical skill, acquired knowledge, and judgment regarding outcomes and risks of these therapies. The need to append the word “qualified” stems from two things: (1) all of the studies conducted to evaluate the efficacy and risks of oral appliances were conducted by dentists with considerable experience in dental sleep medicine, and (2) the unfortunate fact that training in dental sleep medicine is uncommon. Therefore, not all dentists have the training or experience required to deliver knowledgeable care, and application of the literature to practice dental sleep medicine.

Questions

- An oral appliance is never a waste of money
If EVERY patient with OSA was given an oral appliance:
- Approximately 70% would be treated effectively
 - The 30% who aren't would then try CPAP
- Those patients may need to use the oral appliance with their CPAP to reduce the pressure
- If they do well on CPAP, they may use their oral appliance when they can't wear CPAP
 - BUT THEY WOULD ONLY RARELY STICK IT IN THE CLOSET OR SELL IT ON EBAY (like they do with CPAP)

Thank you!

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