Dental Sleep Medicine 2017

What’s New? - part 1

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Disclosures

Commercial companies may have contributed to the meeting organizers to support this presentation

I receive no financial benefit for sales of any product or service mentioned in this talk

I use (and pay for) many of these products in my private practice

I am Editor-in-Chief of Dental Sleep Practice Magazine

Oximetry as P-OSA Screener

50 children with PSG studies

Home Sleep Recorders

Oximetry Studied Separately

With Cutoff of 1 event/hr, 85.5% accuracy with Oximetry

MAD vs. Positional Therapy

81 patients RCT  AHI >5 <30

PT Group: AHI 13 went to 7

OA Group: AHI 11.7 to 9.1

Adherence was Same

Conclusion: Equally Effective
Functional Appliances

Seven Studies
177 Treated, 153 controls

Conclusion: Use of FA in growing patients can enlarge the oropharynx and may decrease risk of future OSA

Commercial Vehicle Operators

AASSM recommendations to the Federal Motor Carrier Safety Administration

OSA Common in drivers
Screeners (BMI) are available
CPAP is effective
CPAP is economically viable
ME’s have guidelines

OSAS Treatment in Non-Obese Patients

May be as common as obesity-related OSA
Less severe symptoms
Lower perception of problems
Higher Sleepiness Score
Lower arousal threshold = less PAP use
More Drugs or OAT may yield greater therapeutic success

Melatonin

Canadian OTC Melatonin

Content: -83% - +478% of label
Lot-to-Lot variation to 465%
8 of 31 samples contained Serotonin: 1 - 75 micrograms
**Custom vs. OTC MAD**

- **25 patients with AHI 13.3 ESS 11**
  - **OTC**
    - Effective: 24%
    - Failures: 36%
    - Nights per Week: 3
    - Patient Preference: 4%
  - **Custom**
    - Effective: 64%
    - Failures: 4%
    - Nights per Week: 7
    - Patient Preference: 84%

**Cerebral Microbleeds**

- **45 male, 30 female**
- **PSG + MRI**
- **AHI > 15 = OR 4.5**

**Cost of Treatment in France**

- **Patients with High CV risk:** CPAP more cost-effective
- **Low CV risk:** Dental Devices 7,710 EUR lifetime
- **CPAP:** 13,754 EUR lifetime
- **Cost of acquiring OA in France is higher**

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**COST-EFFECTIVENESS OF TREATMENTS FOR MILD-TO-MODERATE OBSTRUCTIVE SLEEP APNEA IN FRANCE.**

**Cost Effectiveness in Canada**

Patients list:
1. Improved Health
2. Apnea elimination
3. Improved Sleep
4. Reduced Fatigue
5. Reduced Snoring
6. Bed Partner Benefits

- CPAP is more costly
- Oral Devices more Cost Effective
- Requires <70% PAP use
- > 80% OA use

Canadian Agency for Drugs and Technologies in Health: Continuous Positive Airway Pressure Compared with Oral Devices or Lifestyle Changes for the Treatment of Obstructive Sleep Apnea: A Review of the Clinical and Cost-effectiveness DATE: 22 December 2014

**Does SB cause TMD?**

86 TMD pain patients
46 controls

- Same:
  - Inter-episode intervals
  - SB episodes
  - Total duration of SB episodes

86 TMD pain patients
46 controls

- All female


**American Dental Association**

Task Force Recommendations for HOD 2017

1. Dentists are encouraged to screen for SRBD and refer for diagnosis
2. Screening includes children, although referral and treatments differ from adults
3. Oral appliance therapy is appropriate
4. Physicians prescribe OAT but dentists are responsible for evaluation, choosing, and providing the service
5. Informed consent is required
6. Dentists treating SRBD with OAT should be capable of recognizing and managing side effects

American Dental Association

Task Force Recommendations for HOD 2017

7. Dentists should test patients using OAT for effectiveness, including use of home sleep apnea monitors to obtain interim results for the purpose of OA titration
8. Surgery may be necessary
9. Dentists should continually update their knowledge and training
10. Dentists should maintain regular communication with patient’s other medical providers
11. Follow-up testing by physicians should be done to confirm treatment efficacy
Pediatric Dentist Screening for OSA


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Thank You For Attending AGD 2017!

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Next: Cardiovascular Consequences of Obstructed Airway Sleep