

SLEEP PROSTHODONTICS:

UNDERSTANDING THE HOW BEYOND THE WHY

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GOAL: NASAL AIRWAY

Nasal Airway 24/7/365

2.5 fold increase in resistance with mouth breathing OSA
more frequent with oral breathing
AHI reduced, sleep efficiency improved, increase REM and deep sleep

3 Patients:

Old, Fat Men- obesity related, anatomy modifies
Young, Fit Females- anatomic (nasal and oral)
Children- growing into the problem

Anatomic early, neurologic compromise as age



Notes: _____

MONITORING

High resolution pulse oximeter- Minolta 300i
Patient Safety Software
Sleep Image Cardiopulmonary Coupling

HRPO provides a predictable screening tool for moderate and severe apnea; less sensitive for mild apnea
UARS requires interpretation of pulse rate changes

CPC determines the sleep quality not AHI
Low frequency sympathetic activity and REM
High frequency stable sleep



Notes: _____

RESOLUTION OPTIONS

Interdisciplinary- Make Box Bigger or Improve the Box

Myofunctional Therapy/ Buteyko Breathing Technique

Tongue size and tone Key

Removal of tissue- AT 30-85% success depending on age, weight, race, craniofacial

Maxilla anterior positioning important for patent airway

Orthodontics- traditional, epigenetic, SFOT, Orthognathic



Notes: _____

TREATMENT SEQUENCE/ DIAGNOSTIC PREVIEW

Children: questionnaire and CPC; CBCT/ceph; video; refer

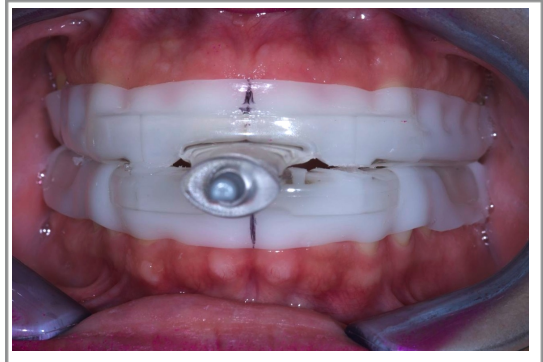
Adult: Maintain then resolve

Buteyko breathing technique- mouth taping sleep

Provisional MAA- myTAP

Combination appliance and tape

Reaction to therapy determines ANS reactivity and referral



Notes: _____

FABRICATION

MAA best in mild/mod but increased wear helps severe
Leaf gauge bite if end-to-end; George gauge 50-60% max
End-to-end- UARS, female; 60% men, OSA, overweight

MAA Ideals:

Minimize vertical, easily adjustable

Minimal space requirements lingual

Allow tongue protrusion



Notes: _____

