hypothesis was that not all tongue base level obstructions on DISE must be treated.
Materials and methods: Case series retrospective analysis was performed for 38 patients with moderate to severe OSA undergoing advanced palatopharyngoplasty surgery for OSA by a single sleep surgeon (Ofer Jacobowitz). Patients underwent DISE immediately prior to surgery, and regardless of tongue base obstruction presence or absence underwent upper pharyngeal surgery alone consisting of expansion sphincter pharyngoplasty, lateral pharyngoplasty and or transpalatal advancement pharyngoplasty. Outcome was measured by polysomnography or home study. Comparison of AHI outcome was performed for those with complete tongue base obstruction to those without and also for patients with circumferential collapse of velum versus those without this pattern.
Results: The group consisted of 29 males and 9 females, with an average age of 47.0 ± 12.5 years, a baseline severely elevated AHI of 44.9 ± 21.3/hr, a BMI of 32.3 ± 4.9 kg/m^2, a Friedman tongue position score of 2.4 ± 0.6, and a tonsil size of 1.5±0.9 Eleven patients (29%) had multilevel, complete tongue base obstruction and nineteen (50%) had no obstruction. These two groups were similar in age, body mass index, AHI, but the complete tongue base obstruction group had smaller tonsils and higher tongue position. The post-operative success rate and AHI in the group without tongue base obstruction were not significantly different from those of the complete obstruction group (68%;17.4±11.0 vs. 73%;15.4±20.5, p=1.00). Seventeen patients (45%) had circumferential collapse of velum. The postop AHI was higher for patients with circumferential collapse (23.6±15.8 from 55.3±22.1 vs.10.5±9.94 from 36.4±16.7, p< .0001), but both groups had clinically and statistically significant AHI reductions.
Conclusions: In this single surgeon series, patients with multilevel obstruction on DISE, treated with palatopharyngoplasty alone had similar AHI outcome as those with unilevel obstruction. Multilevel surgery may be not be needed or tongue base surgery may be reserved to a second stage in some patients with multilevel DISE obstruction pattern. Circumferential collapse of the velum, however, was associated with a higher residual AHI.
Acknowledgements: Orange Regional Medical Center and New York Eye and Ear Infirmary of Mount Sinai.

Insomnia

THE RELATIONSHIP BETWEEN PRE-SLEEP MONITORING BEHAVIOR AND AROUSAL IN PEOPLE WITH DIFFERENT STRESS REACTIVITY AND CHRONIC INSOMNIA

Y.-W. Jan [1,2], C.-M. Yang [3,4]. [1] *Sleep Research Center, Taipei Medical University Hospital, Taiwan;* [2] *Research Center of Sleep Medicine, College of Medicine, Taipei Medical University, Taiwan;* [3] *Department of Psychology, Taiwan;* [4] *The Research Center for Mind Brain and Learning, National Cheng-Chi University, Taipei, Taiwan*

Introduction: The cognitive model of insomnia elucidated the importance of monitoring for sleep-related threat in fueling insomnia. The AYE Model proposed that there is a shift of attention from stress-related threats toward sleep-related stimulus in the transition from acute to chronic insomnia. This study was aimed to test this hypothesis by comparing the attention bias among good sleepers with different levels of stress reactivity, individuals with transient insomnia, and patients with chronic insomnia.
Materials and methods: Participants (N=59) completed the Ford Insomnia Response to Stress Test (FIRST), Insomnia Severity Index (ISI), Sleep Associated Monitoring Index (SAMI) and the Pre-Sleep Arousal Scale (PSAS). Based on clinical interview and the scores on the ISI, FIRST, they were classified into four groups: normal sleeper with low stress reactivity (LF), normal sleepers with high stress reactivity (HF), individual with transient sleep disturbance (TI) and individuals with chronic insomnia (CI). All participants underwent a pre-sleep physiological recording (eg. peripheral temperature, skin conductance, EEG) and had one night of PSG recording to screen for sleep disorders. One-way analysis of variance (ANOVA) was conducted to compare sleep monitoring behaviors among four groups. Pearson correlation was used to examine relationships between sleep monitoring behaviors and pre-sleep physiological arousal.
Results: There was a significant difference in SAMI between four groups (F=8.675, *p*< .001). Post-hoc comparisons revealed that LF groups had significantly less slept monitoring behaviors than the other three groups; there were however no differences among the other three groups. In addition, the SAMI score of CI showed positive correlation with PSAS score (r=.541, *p*< *.025*), and the SAMI of HF correlated negatively with delta power at frontal site (r=-.910, *p*< *.016*). The rest of the correlations did not show significant findings.
Conclusions: Increased attention toward to sleep-related threats was found to be in participants with acute and chronic insomnia, as well as in normal sleepers with high stress reactivity. It suggests that sleep monitoring behaviors might be an important predisposing factor for insomnia. Moreover, the sleep-related attention might become associated with pre-sleep hyperarousal when the sleep disturbance getting into chronic in course.

Insomnia

TREATMENT GOALS AMONG PATIENTS WITH INSOMNIA DISORDER: THEIR PERCEIVED IMPORTANCE AND ASSOCIATION WITH CLINICAL PARAMETERS

M. Jansson-Fröjmark [1], R. Sunnhed [2]. [1] *Karolinska Institute, Sweden;* [2] *Stockholm University, Stockholm, Sweden*

Introduction: Very little is known about important treatment goals among patients with insomnia disorder. This study aimed at identifying central treatment targets and examining the association of these goals with clinical parameters.
Materials and methods: Two-hundred nineteen patients with insomnia disorder rated the importance of 18 various treatment goals [from 0 (not at all important) to 10 (very important)] and completed questions on clinical correlates (insomnia severity, functional impairment, quality of life, sleep medication, psychiatric comorbidity, and somatic comorbidity).
Results: Based on a predetermined cutoff (7.5 or higher), eight treatment goals were rated as important: reduced frequency of sleep disturbance, reduced dissatisfaction with sleep, longer total sleep time, improved concentration, memory or attention, reduced wake time after sleep onset, reduced worry about sleep, reduced tiredness during the day and improved functioning in occupational activities. Insomnia severity and functional impairment were the most consistent predictors of the treatment goals with moderate to strong correlations. The remaining predictors were either not significantly related to the goals or were correlated at a lower level.
Conclusions: The fact that both night- and daytime symptoms were represented as the most important treatment goals emphasizes the need to view insomnia as a 24-hour problem in clinical and research settings. As several of the important treatment goals are seldom assessed in clinical practice, this calls for developing and using measures that cover the full spectrum of important targets for those with insomnia.
Acknowledgements: We thank the Swedish Research Council for funding.

Insomnia

PREDICTORS OF SUICIDE RISK IN A SAMPLE WITH INSOMNIA DISORDER

M. Jansson-Fröjmark [1], R. Sunnhed [2]. [1] *Karolinska Institute, Sweden;* [2] *Stockholm University, Stockholm, Sweden*

Introduction: Previous evidence suggests that insomnia symptoms are related to elevations in suicide risk. This study aimed at investigating the associations between socio-demographical and clinical parameters with suicide risk in patients with insomnia disorder.
Materials and methods: Two-hundred nineteen patients with insomnia disorder completed questions on socio-demographics (age, gender, civil status, occupational status, and educational status), clinical correlates (insomnia severity, functional impairment, anxiety, depression, quality of life, any medication, sleep medication, psychiatric comorbidity, and somatic comorbidity), and suicide risk (one question from the MADRS-S).
Results: A multivariate linear regression analysis using only the eight significant parameters from univariate analyses demonstrated that gender (male), any medication, elevated anxiety, and lower quality of life were independent predictors of increased suicide risk (R^2 = .32; the non-significant variables were insomnia and functional impairment severity, levels of depression, and psychiatric comorbidity).