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DOES EXPIRATORY MOUTH LEAK DURING CPAP TITRATION PREDICT NON-ADHERENCE IN OSAS PATIENTS?

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Introduction: The aim of this study is to compare Expiratory Mouth Leak (EML) during CPAP titration in the adherent and non-adherent OSAS patients.

Methods: Retrospective analysis was done for 29 patients who had moderate-to-severe OSAS and received full night of PSG recording and CPAP titration. Twenty-nine patients (age: 63.2 ± 12.5 [mean ± SD] years, body mass index [BMI]: 25.7 ± 4.9 kg/m2) were divided into adherence (n = 16, F1;M15) and non-adherence groups (n = 13, F2;M11) according to the cut-off criteria with an average CPAP usage > = 4 hours per night for the first 30 days. Sleep and respiratory variables were scored according to the standard method for the diagnostic and CPAP titration PSG data. For the data on the CPAP titration night, EML was scored as 'truncated' expiratory CPAP flow with a nasal mask. EML Period (EMLP) was assessed as the percentage of total sleep time. In addition, 4 types of EML with arousal (post-event EML, during-event EML, Spontaneous Arousal [SpAr] related EML and EML pre SpAr) were counted and index per hour of sleep was calculated.

Results: Adherence and non-adherence groups did not differ for age, sex, and BMI. Adherence group used CPAP significantly longer (5.4 ± 0.8 hours per night) compared to non-adherence group (2.3 ± 1.0 hours per night) (p < 0.001) although CPAP pressure did not differ between the two groups. Two groups did not differ for sleep and respiratory variables on the diagnostic PSG and CPAP titration nights. However, SpAr related EML occurred more frequently in non-adherence group (1.34 ± 1.16/hour) than in adherence group (0.47 ± 0.38/hour) (p = 0.014). No significant difference was found for other types of EML with arousal and EMLP.

Conclusion: Frequency of SpAr related EML can be associated with a low CPAP adherence in OSAS patients

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DIFFERENTIAL CHARACTERISTICS OF WOMEN AND MEN ADHERENT AND NON-ADHERENT TO TREATMENT FOR SLEEP APNEA

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Introduction: Obstructive sleep apnea, known to be common among older adults, goes mostly unrecognized, particularly among women. In a prospective study, we recruited older adults, not previously suspected of having sleep apnea, from two family medicine clinics. The present report describes gender differences and similarities in treatment adherence at 2-year follow-up.

Methods: Participants were 31 older women and men (n = 19 and 12, respectively, mean age = 58) who were diagnosed with sleep apnea in the course of the larger study (n = 180). At recruitment, they underwent polysomnographic screening and completed the Sleep Symptom Checklist (SSC), a 21-item survey of a broad range of symptoms that fall into 4 subscales: Insomnia, Daytime Distress, Sleep Disorders, and Psychological Distress. The 31 participants who reached the 2-year follow-up were asked about treatment adherence.

Results: In the larger study, 75% of women and 85% of men received a sleep apnea diagnosis. Their apnea/hypopnea indices (AHI) were similar (women = 29 and men = 34). For those participating in the present 2-year follow-up, women generally had had a higher AHI at recruitment than men (37 vs. 24, respectively). At follow-up, more women had adhered to treatment than men (47% vs. 25%, respectively). There were no differences in AHI between adherers and non-adherers regardless of gender. In general, the women had reported worse symptoms on the SSC at recruitment: Adherent women had worse Sleep Disorder symptoms at recruitment than non-adherers and all men. There were no differences in SSC scores between male adherers and non-adherers.

Conclusion: Of those available for follow-up, women had more severe AHI and reported symptoms at recruitment, as compared with men. Importantly, a greater percentage of women were found to have adhered to treatment. This study signals the need for greater awareness of and attention to sleep apnea screening and treatment for women in primary care.

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NOT TOO OLD FOR CPAP

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Introduction: Age promises largely negative sleep effects with higher Obstructive Sleep Apnoea (OSA) prevalence, more spontaneous waking at a time of greater co-morbid illness, domestic isolation and for some socio-economic disadvantage. There is only limited data on Continuous Positive Airway Pressure (CPAP) effective in the elderly. A recent multi-centred (Predict study, 2015) suggested low CPAP average use in those over 65 years. We aimed to compare CPAP compliance and early outcome in older adults c.f. younger adults and determine factors related to compliance in a clinical co-hort.

Methods: Data was been retrospectively collected for all CPAP naïve adult patients starting CPAP treatment at WellSleep in the first 5 months of 2012 and 2014. Patients over 65 years in the first 5 months of 2015 were also added. We compared objectively measured CPAP compliance (at 2 and 4 weeks), demographic data (age, gender), OSA severity by Apnoea Hypopnoea Index (AHI), Epworth Sleepiness Scale (ESS), comorbid illness, level of socioeconomic deprivation (NZDep14) and prescribed pressure.

Results: 129 younger (less 65 years) adults (73.6% male, mean ESS 12.9/24, mean AHI 61.54 /hr) and 57 older adults (over 65 years) (79 % male, mean ESS 11.7/24, mean AHI 54.35 /hr) trialled CPAP. The mean compliance in the older adults 5.39 ± 2.09/night was similar to younger adults 4.90 ± 2.22hr/night (p = 0.16). Compliance was highest in the over 75 year old group, 5.84 ± 2.16 h/night (p = 0.34). Home support did not related to CPAP compliance (p = 0.49). Presence of hypertension or diabetes did not affect compliance (p = 0.45). Older adults had lower BMI and prescribed levels of CPAP. There initial level of sleepiness (ESS), gender, OSA severity or level of socio-economic deprivation did not predict compliance.