

WORLD CONGRESS ON SLEEP APNEA

August 27 - September 1, 2012 ROME - ITALY

ABSTRACT BOOK

Thursday, 30 August 2012

Pontificia Universitas Lateranensis

Hall "SYDNEY"

Hall SYDNEY POSTER SESSION

15.00 -17.00

Presidents: Cirignotta F., Pavelec V., Sanna G., Menchinelli C.

PS02 Poster Session "Comorbidity"

P17 The association between sleep apnea and young adult with hypertension: a case control study in Malaysia

Asha'ari ZA1, Hasmoni HM2, Rahman J3, Yusof RA4, Ahmad R1

¹Department of Otorhinolaryngology-Head & Neck Surgery, Jalan Hospital, Malaysia; ²Department of Internal Medicine, Jalan Hospital, Malaysia; ³Department of Community Medicine, Jalan Hospital, Malaysia; ⁴Outpatient Unit, Beserah Health Polyclinic, Pahang, Malaysia

P18 Sleep Disordered Breathing in Friedreich's Ataxia

Copland J1, Ho M1, Corben LA2, Tai G2, Delatycki MB2,3

Department of Respiratory and Sleep Medicine, Monash Medical Centre, Clayton, Victoria; Bruce Lefroy Centre for Genetic Health Research, MCRI, Parkville, Victoria, Australia; Department of Clinical Genetics Austin Health, Heidelberg, Victoria, Australia.

P19 Detection of anticardiolipin antibodies in OSA patients

Coutinho PL, Feres MC, Moraes WAS, Cintra FD, Poyares D, Tufik S

Department of Psicobiologia, Universidade Federal de Sao Paulo, Sao Paulo, Brazil.

P20 Ischemic heart disease and OSAS.

Cuellar-Raya P¹, Soto-Hurtado EJ¹, Garcia-Jimenez JM¹, Benitez-Parejo N², Fernandez-Guerra J¹, Escribano-Dueñas A¹, Mora-Ruiz E¹, Cebrian-Gallardo JJ¹.

¹Unidad de Neumologia. Hospital: Agencia Sanitaria Costa del Sol. City: Marbella. Country: Spain; ²Unidad de Investigación y Evaluación, Agencia Sanitaria Costa del Sol, Marbella, Ciber de Epidemiología y Salud Pública, city: Málaga, country Spain

P21 The influence of BMI between oxyhemoglobin indices and arousal index for patients with OSA

Hang LW1,2, Lin CL3, Hsieh TM3

¹Sleep Medicine Center, Department of Internal Medicine, China Medical University Hospital; ²Department of Healthcare Administration, Asia University, Taichung, Taiwan; ³Medical Electronics and Device Technology Center, Industrial Technology Research Institute, Hsinchu, Taiwan The mean age of 55 patients included were 57.2 \pm 1.5 years and body mass index (BMI) was 27.7 \pm 4.7 kg/m²; 87.3% of patients were male. The mean Epworth sleepiness scale (ESS) score was 12.8 \pm 5.7 before CPAP titration. The mean value of AHI and RDI was 47.2 \pm 17.6 and 51.7 \pm 15.3 per hour. Residual AHI and RDI at the PAP determined was 2.1 \pm 2.9 and 5.5 \pm 5.2, respectively. After two weeks of cross-over use of fixed or APAP, fixed CPAP was chosen in 39 (70.9%) patients and APAP in 16 (29.1%) patients as ongoing treatment.

Among 55 patients, 24 patients (45.5%) required pressures of 8 to 10 cm $\rm H_2O$ for adequate CPAP titration, 13 (23.6%) patients above 10 cm $\rm H_2O$, and 17 (30.9%) patients below 8 cm $\rm H_2O$. Therapeutic CPAP could not be determined in one patient. Of the 13 patients with titrated CPAP above 10 cm $\rm H_2O$, APAP was selected for 4 patients, and of 9 patients using fixed CPAP. CPAP level was decreased by 5 cm $\rm H_2O$ in one patient and by 1 cm $\rm H_2O$ for 4 patients during the follow-up period. Moreover, among 17 (30.9%) patients whose CPAP was below 8 cm $\rm H_2O$, APAP was selected for 6 patients in terms of patient preference and optimizing residual AHI

during PAP therapy and CPAP level of 3 patients in the remaining 11 patients who selected fixed CPAP was adjusted to increase \geq 2 cm H₂O. Therefore, nine (52.9%) of 17 patients whose required pressure was below 8 cm H₂O needs APAP or major change in CPAP level.

Conclusions

Even after adequate CPAP titration, APAP or pressure change of fixed CPAP can be considered in patients with severe OSA, especially if their titrated CPAP level is within higher or lower range.

PS02 Poster Session "Comorbidity"

P17 The association between sleep apnea and young adult with hypertension: a case-control study in Malaysia

Asha'ari ZA¹, Hasmoni HM², Rahman J³, Yusof RA⁴, Ahmad R¹ Department of Otorhinolaryngology-Head & Neck Surgery, Jalan Hospital, Malaysia; ²Department of Internal Medicine, Jalan Hospital, Malaysia; ³Department of Community Medicine, Jalan Hospital, Malaysia; ⁴Outpatient Unit, Beserah Health Polyclinic, Pahang, Malaysia

ABSTRACT

Introduction

Younger patients with sleep apnea have higher risks of cardiovascular mortality compared to their normal counterpart. Yet, it remains a continued struggle to find a suitable cost-effective means of screening for sleep apnea in the young population.

Objectives

To study the association between sleep apnea and hypertension in younger age group than previously studied, adding upper airway sizes at endoscopy as important compounding variables often not included in the past.

Methods

We analyzed data on polysomnography tests, body mass index (BMI), neck circumference, upper airway endoscopy sizes, habitus and health history in 120 hypertensive and 120 non-hypertensive participants in a clinic-based setting. Independent t-test, chi-square, multivariate analysis and binary logistic regression models were used for case-control comparison.

Results

The mean age of the participants was 27 years; 67.5% were men. The incidence and severity of sleep apnea were significantly higher in the hypertensive than the control subjects. Persons with hypertension had odds ratio of 2.7 times of having comorbid sleep apnea than patients without hypertension (95% confidence interval [CI] 1.2-6.1). Persons with sleep apnea (AHI \geq 5) had odds ratio 2.76 (95% CI 1.57-4.86) and persons with severe sleep apnea (AHI \geq 30) had odds ratio 7.94 (95% CI 4.21-15.33) of having hypertension than did persons without sleep apnea. Although adjustments for the compounding factors, particularly the BMI decreased the odds ratio to a large degree, subjects with severe sleep

apnea were still 72% more likely to have hypertension than subjects without sleep apnea.

Conclusions

Sleep apnea is related to hypertension in our study population. The association was more pronounced with the increasing severity of sleep apnea. Screening for sleep apnea should be considered in young adult with hypertension.

P18 Sleep Disordered Breathing in Friedreich's Ataxia

Copland JI, Ho MI, Corben LA2, Tai G2, Delatycki MB23
1Department of Respiratory and Sleep Medicine, Monash
Medical Centre, Clayton, Victoria; 2Bruce Lefroy Centre for
Genetic Health Research, MCRI, Parkville, Victoria, Australia;
3Department of Clinical Genetics Austin Health, Heidelberg,
Victoria, Australia.

ABSTRACT

Introduction

There has been very little published data regarding the prevalence of Sleep Disordered Breathing in Friedreich Ataxia (FRDA) patients although some patients complain of snoring and poor sleep. The aim of the study is to document the incidence and degree of sleep disordered breathing in FRDA patients, as well as to analyse any trends observed in the type and quality of sleep.

Methods

A review of clinically indicated polysomnographic (PSG) studies on FRDA patients was conducted. Sleep parameters included in the analysis were the sleep latency (SL), rapid eye movement (REM) latency, total sleep time (TST), sleep efficiency, NREM sleep %, REM sleep %, Respiratory Disturbance Index (RDI) and 4% Oxygen Desaturation Index (QDI).

Results

Twenty PSG studies [9 male: age 36.3 ± 11.5 years: Body mass Index (BMI) 24.2 ± 4.2 kg/m2; Friedreich's Ataxia Rating Scale (FARS score) 103±22.8] were available for analysis. Thirteen studies were performed at the Monash Sleep Centre and 7 from other sleep centres across Australia and New Zealand. No observable trend was noted in the sleep architecture with normal proportions of NREM (83.2± 9.7%). and REM (16.8 \pm 9.7%) occurring. However the sleep efficiency (55.9-80.3%) (Range), Sleep Latency (0-102 min) and REM latency (32-331.5 min) were quite varied within the group. There was a high proportion of Sleep Disordered breathing amongst the group [Total RDI 16.6 \pm 16 /hr ; ODI 11.6 \pm 15.2/hr]. Seven patients had severe OSA (RDI > 15/hr). nine had mild OSA (RDI 5- 15/hr) and four had no OSA (RDI < 5/hr).None had central sleep apnoea or nocturnal ventilation. Sleep parameters were correlated with disease parameters, measures of disease severity and related correlation functional impairment using Pearsons coefficients. The FARS score positively correlated with total RDI (r=0.61, p<0.01) and ODI (r=0.73, p<0.05).

Conclusion

There appears to an increased incidence of more severe OSA among FRDA patients who have greater disease impairment.

P19 Detection of anticardiolipin antibodies in OSA patients Coutinho PL, Feres MC, Moraes WAS, Cintra FD, Poyares D, Tufik S

Department of Psicobiologia, Universidade Federal de Sao Paulo, Sao Paulo, Brazíl.

ABSTRACT

Introduction

Obstructive sleep apnea syndrome (OSA) is emerging as an important modifiable risk factor for stroke. However, the mechanisms involved in this relation are not completely understood. Some studies have shown that OSA is associated with impaired endothelial function and hypercoagulability. Antiphospholipid antibodies such as Anticardiolipin antibody (aCL) are established risk factors for ischemic stroke due to their procoagulating and atherogenic properties. We hypothesized that aCL may be