Greater separation of systolic blood pressure in males at first and most recent visit for clinical management after age 55

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Introduction: Obstructive sleep apnea (OSA) is an independent risk factor for cardiologic impairment with comorbidities that include cerebrovascular diseases and metabolic syndrome. EENAs point-of-care specialty practice offers a unique opportunity to perform retrospective analysis to assess comorbidities associated with OSA and the prevalence between males versus females. The importance of such an analysis is to help elucidate the influence of a comorbid condition on the progression of OSA and vice versa. The overall objective of this study is to conduct a review and analysis of medical records for over 570 patients diagnosed with OSA to assess changes in parameters such as BP, BMI, and EPSS after medical intervention.

Methods: Data from electronic medical records were compiled and statistically analyzed from patients with an age range of 19-85yrs who had a polysomnographic diagnosis of OSA. Of the total subjects studied 317 were male and 248 female. There were 152 males of age <55yrs and 165 males of >55yrs of age. There were 120 females of age <55yrs and 128 females >55yrs of age. All patient information was collected strictly per HIPPA guidelines and regulation. Where relevant, IRB consent forms had previously been obtained and signed.

Results: This study collected and analyzed data of over 317 male and 248 female subjects diagnosed with OSA over a period of 2 years. There was a greater separation in a systolic and reasonable change in diastolic BP in males at first and most recent visit after age 55 while most female BP remained overlapped. There was a higher cluster of low EPSS score at a recent visit in both males and females but not correlative to blood pressure. BMI did not change in both male and female across all ages.

Conclusions: Age was a predictive factor in associating changes in blood pressure with clinical management of OSA in males but not females. Epworth Sleepiness Scale (EPSS) score improved after clinical intervention in all patients however BMI remained unchanged in both sexes and all age groups. Further analysis is needed to determine factors that may influence the changes observed.

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