

PATIENTS WITH VENOUS THROMBOEMBOLISM HAVE HIGHER PREVALENCE OF OBSTRUCTIVE SLEEP APNEA

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Background: Obstructive sleep apnea (OSA) has been linked to many cardiovascular diseases. Recent studies have linked OSA, endothelial dysfunction, and elevated CRP. The link between OSA and venous thromboembolic events (VTE) has not been well elucidated.

Methods: We retrospectively collected data based on ICD-9 codes at the UMHC from August 1999 - April 2009. Patients were identified as VTE with ICD-9 codes 415.11, 415.12, 415.19, 453.4, 453.9, 453.41, 453.42, 671.33, 671.44 and as OSA with codes 327.2, 327.23, 780.5, 780.51, 780.53, 780.57, 786.03. Continuous data were expressed as means or medians and compared using the student t or the Mann-Whitney tests. Categorical variables were expressed as percentages and compared using the Chi-square or Fisher exact tests. Eighty-two random charts were reviewed for validation.

Results: 1412 patients were identified with the diagnosis of VTE; 57.2% were females and the mean age was 54.2 ± 17.4 years. Of 1412 patients, 301 were also diagnosed with OSA yielding a prevalence of 21.3%. There was no difference between the two groups (with or without OSA) in age or gender. The random sample analysis revealed that the prevalence of sleep apnea was 23%.

Conclusion: In patients with VTE, the prevalence of OSA appears to be much higher than the general population. We found that prevalence was as high as 23%.