Prevalence of Interatrial Block in Patients with Obstructive Sleep Apnea

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Background: It is well-known that obstructive sleep apnea (OSA) increases risk of atrial fibrillation (AF). The presence of interatrial block (IAB) has been shown to correlate with the occurrence of AF. However, the prevalence of IAB in patients with OSA is unknown.

Objective: We sought to study the prevalence of IAB in patients with OSA. The association between the presence of IAB and severity of OSA was also examined. Severity of OSA was categorized into the non-severe OSA group (defined as apnea-hypopnea index (AHI) 5-30) and the severe OSA group (defined as AHI>30). While, IAB was defined as maximum P wave duration (PWD) ≥ 120 ms.

Methods: This was a cross sectional study. Patients diagnosed with OSA from polysomnography during January - December 2017 were consecutively enrolled into the study. The 12-lead ECG was performed in each patient. We excluded patients who did not have sinus rhythm.

Results: A total of 210 OSA patients were included in the study (male 54.3%, mean age 60.0±13.7 years). Baseline characteristics were not different between patients with and without IAB. Mean BMI was comparable between those with and without IAB (29.9±7.0 kg/m² vs 28.0±5.7 kg/m²). Majority of patients had severe OSA (93%). Prevalence of IAB in patients with OSA was 79.5%. The prevalence of IAB did not differ between the severe OSA group and the non-severe OSA group (79.5% vs 80.0%, respectively, P=1.0).

Conclusion: There is a high prevalence of IAB in patients with OSA, but no association between severity of OSA and the prevalence of IAB.

Keywords: IAB, PWD, OSA, AHI