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EDİTÖRE MEKTUP
LETTER TO THE EDİTOR

Does diabetic neuropathy affect cyclic alternating pattern rates in patients with obstructive sleep apnea syndrome?

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Obstructive sleep apnea syndrome (OSAS) is characterized by an intermittent, complete or partial upper airway obstruction during sleep causing hypoxia, sleep disruption, daytime sleepiness, mental and physical effects, is the second most common respiratory condition; affecting 0.3-4% of the middle-aged population (1). OSAS is strongly associated with cardio-metabolic derangements. Intermittent hypoxia, sleep fragmentation and sympathetic activation are the main causes of insulin resistance. There is growing strong evidence related to an independent contribution of OSAS to the development of cardiometabolic diseases and associated risk factors such as inflammation, diabetes mellitus, hypertension, and chronic kidney disease (2).

Diabetes mellitus (DM) is one of the most common chronic diseases that affect the somatic and the autonomic nervous system. Several studies indicate an association between OSAS and diabetic neuropathy (3). Keller et al. have shown that autonomic neuropathy may play a role in upper airway collapse among diabetic patients (4).

Cyclic alternating pattern (CAP) which is an important marker of unstable sleep is recently defined as a metrics of sleep physiology. The phenomen is a periodic electroencephalography (EEG) activity of non-rapid eyes movement (NREM) sleep. Today, CAP is known as an arousal which is the oscillation of the EEG activity. This issue is not limited in the EEG activities but reflects on the ongoing autonomic activity and behavioral functions. CAP can be seen in all age groups (5). In the knowledge of our investigation, there is no study about CAP rate in diabetic patients with OSAS. Does diabetic neuropathy

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affect the CAP rates in this population? In the other words: How does diabetic neuropathy alter the autonomic activity in these people. To address these questions, further prospective studies are warranted to evaluate the role of diabetic neuropathy and CAP rates in patients with OSAS.

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