Polyneuropathies and Sleep Disorders

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Abstract

Polyneuropathies are a heterogeneous group of peripheral nerve disorders that frequently cause motor, sensory, and autonomic dysfunction. Increasing evidence suggests that these conditions may also significantly affect sleep quality and sleep architecture. Patients with polyneuropathies frequently report insomnia, sleep fragmentation, restless legs syndrome, periodic limb movements during sleep, and sleep-related breathing disorders, particularly obstructive sleep apnea. The underlying pathophysiological mechanisms may include neuropathic pain, increased sensory symptoms, autonomic dysfunction, and metabolic factors such as diabetes mellitus and renal insufficiency. Sleep disturbances may further aggravate pain perception, daytime sleepiness, cognitive functioning, and emotional well-being, creating a bidirectional relationship between neuropathic symptoms and impaired sleep. Timely identification and management of sleep disturbances are therefore important components of comprehensive care. Diagnostic evaluation may include polysomnography when clinically indicated, while treatment should focus on optimizing pain control, addressing metabolic comorbidities, and providing disorder-specific therapy for sleep-related breathing abnormalities. This lecture will review current knowledge of the relationship between polyneuropathies and sleep disorders, highlight relevant clinical implications, and discuss practical diagnostic and integrated treatment approaches.

Keywords: polyneuropathy; sleep disorders; obstructive sleep apnea

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Polineuropatije i poremećaji spavanja

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Sažetak

Polineuropatije su heterogena skupina bolesti perifernih živaca koje često uzrokuju motoričke, senzoričke i autonomne poremećaje. Sve više dokaza upućuje na to da ove bolesti mogu značajno utjecati i na kvalitetu te arhitekturu spavanja. U bolesnika s polineuropatijama često se bilježe nesanica, fragmentacija spavanja, sindrom nemirnih nogu, periodički pokreti udova tijekom spavanja i poremećaji disanja povezani sa spavanjem, osobito opstruktivna apneja u spavanju. Temeljni patofiziološki mehanizmi mogu uključivati neuropatsku bol, pojačane senzoričke simptome, autonomnu disfunkciju i metaboličke čimbenike poput šećerne bolesti i bubrežne insuficijencije. Poremećaji spavanja mogu dodatno pogoršati percepciju boli, dnevnu pospanost, kognitivno funkcioniranje i emocionalno stanje, stvarajući dvosmjernu povezanost neuropatskih simptoma i narušenog spavanja. Pravodobno prepoznavanje i liječenje poremećaja spavanja stoga su važni dijelovi sveobuhvatne skrbi. Dijagnostička obrada prema kliničkoj indikaciji može uključivati polisomnografiju, dok liječenje treba biti usmjereno na optimizaciju kontrole boli, zbrinjavanje metaboličkih komorbiditeta i specifično liječenje poremećaja disanja tijekom spavanja. Predavanje će prikazati suvremene spoznaje o povezanosti polineuropatija i poremećaja spavanja, istaknuti važne kliničke implikacije te razmotriti praktične dijagnostičke i integrirane terapijske pristupe.

Ključne riječi: polineuropatija; poremećaji spavanja; opstruktivna apneja u spavanju

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