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Session Name : Chronic Kidney Disease

Session Topic : Chronic Kidney Disease

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Sleep Disorder in CKD

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Sleep disturbances are remarkably prevalent among patients with Chronic Kidney Disease (CKD), especially those with End-Stage Renal Disease (ESRD). Research indicates that approximately 80% of patients receiving dialysis report sleep-related complaints, and more than 50% of patients with moderate-to-severe CKD (not yet requiring dialysis) experience poor sleep quality. These conditions are not merely symptoms but significant factors that increase morbidity, mortality, and cardiovascular risks while severely diminishing the overall quality of life. The primary sleep disorders identified in the CKD population include insomnia, Restless Legs Syndrome (RLS), and Obstructive Sleep Apnea (OSA). Insomnia affects roughly 60% of hemodialysis (HD) patients, compared to only 10% of the general population. Its etiology is multifactorial, involving chronic pain, psychological stress, and impaired melatonin rhythms. RLS prevalence also rises as renal function declines, reaching approximately 23.5% in ESRD. It is closely linked to iron deficiency, anemia, and uremia, often causing patients to prematurely discontinue dialysis sessions due to severe nocturnal discomfort. Furthermore, OSA is exceptionally frequent, occurring in 30–73% of patients. This is largely driven by nocturnal volume overload and fluid redistribution (rostral fluid shift) which increases upper airway resistance. Effective management requires an integrated approach within the dialysis unit. For insomnia, non-pharmacological interventions such as Cognitive Behavioral Therapy for Insomnia (CBT-I) and sleep hygiene are recommended, alongside pharmacological options like melatonin or non-benzodiazepine receptor agonists. RLS treatment focuses on iron supplementation and alpha2-delta ligands, such as gabapentin or pregabalin. For OSA, Continuous Positive Airway Pressure (CPAP) remains the first-line treatment, though conversion to nocturnal hemodialysis can also significantly reduce fluid-related

airway obstruction. Prompt screening and targeted therapy are essential for improving long-term health outcomes in CKD patients.

Keywords: CKD, sleep disorders, insomnia, RLS, OSA