Restless legs syndrome in dialysis patients

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Objective

To look for an association between restless legs syndrome (RLS) and chronic kidney disease (CKD) in dialysis patients; to analyze the characteristics of RLS in this population of patients; and to identify possible risk factors for the development of RLS.

Methods

Fifty-eight consecutive hemodialysis patients were evaluated by means of a face-to-face interview. RLS was diagnosed using the International RLS Study Group (IRLS) criteria. A cut-off frequency of at least two times a week was used for RLS symptoms.

Results RLS was diagnosed in 21.4% of patients. RLS symptoms were commonly reported as deep and bilateral and were usually described as *an urge to move*. According to IRLS score, 73.3% of RLS patients were affected by a moderate form. Sleep characteristics were significantly altered in RLS patients (sleep latency: 57±6 vs. 12±1mins, $p<0.001$; total sleep time: 261±15 vs. 408±10 mins, $p<0,001$; NAP: 65±9 vs. 22± 4 mins, $p<0,001$). Uremic patients with RLS showed significantly lower percentage of transferrin saturation (20±2 vs. 25±1%, $p<0.05$), higher values of PCR (44±24 vs. 15±4 mg/L, $p<0.04$) and longer duration of dialysis sessions (4.04±0.14 vs. 3.77±0.05 hours, $p<0.05$).

Conclusions

This study confrms the high prevalence of RLS in uremic patients. Risk factors include a lower percentage of transferrin saturation, higher value of PCR and longer duration of dialysis session. These results confirm the role of iron deficiency as a cause of RLS and suggested a possible role of flogosys for the development of RLS in uremic patients. Clinical characteristics of RLS in this population are those of a secondary form.