Successful treatment of refractory idiopathic restless legs syndrome/Willis-Ekbom disease: a case report

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Objective: Restless legs syndrome/Willis-Ekbom disease (RLS/WED) frequently results in sleep disturbances and accompanying impaired daytime activities, especially in the refractory cases. Opinions are still divided in the effectiveness of regimens of refractory RLS/WED.

Methods: The patient was diagnosed as RLS/WED according to the diagnostic criteria published by the International Restless Legs Syndrome Study Group (IRLSSG). A refractory case is defined as restless legs unresponsive to monotherapy with tolerable doses of the first-line therapy (a dopamine agonist or alpha₂ delta ligand). The effectiveness of combination treatment was evaluated by International Restless Legs Scales (IRLS). The improvement of quality of sleep upon treatment was assessed by Insomnia Severity Index-Chinese Version (ISI-C).

Results: This 62 year-old gentleman presented with 3-year history of urge to move his both uncomfortable legs when he was lying especially at bedtime. This urge to move the unpleasant legs might be alleviated by stretching. However resultant poor quality of sleep and daytime tiredness had been bothering him. Polysomography showed normal apnea-hypopnea index (2.3 / hour) but higher PLM index (19.4 /hour). Iron profile was within normal limits (Iron 121 μ g/dl, TIBC 314 μ g/dl, Ferritin 156.9 ng/ml); renal function tests also revealed normal results (Cr 0.9 mg/dl, BUN 14 mg/dl). Nerve conduction studies demonstrated no evidence of peripheral neuropathies of lower limbs. Initially he had received gradually titrated regimens of dopamine agonist (Mirapex 0.75mg at bedtime) for 2 months. However his symptoms persisted and resultant poor quality of sleep severely influenced his working performance as well. Therefore the combination regimens at bedtime with Requip F.C 1mg, Tramadol 37.5mg and Rivotril 0.5mg were prescribed. After four weeks' treatment course, IRLS score improved from 31 to 15. In addition, ISI-C score improved from 25 to 8.

Conclusion: This case illustrated the effectiveness of combination therapy in treatment of refractory RLS/WED and restoration of better sleep. Early recognition and timely administration of combination therapy will lead to better effect and improved quality of sleep in patients with refractory RLS/WED.