

Restless legs syndrome in end stage renal disease

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Undoubtedly, restless legs syndrome (RLS) is one of the common symptoms in patients with end stage renal disease (ESRD), and the prevalence of the disorder has been estimated to be between 20 and 60% of the ESRD population. It is of note that although the prevalence of RLS in the general population is clearly lower in Asia compared with Western countries, the rate is quite similar between the countries, suggesting that RLS in ESRD occurs beyond racial difference.

When evaluating the prevalence of RLS among each renal dysfunction category, the rate becomes higher among cases grade 3 or above, and sharply rises in grade 5 (i.e. ESRD). Moreover, it has been known that RLS symptoms in most of ESRD patients disappear shortly after renal transplantation.

Taking this into account, accumulation of uremic toxin, can, to a certain degree, be hypothesized to be responsible for the occurrence of RLS, but a candidate toxic substance has not been found to date.

In clinical settings, severity of RLS symptom and consequent nocturnal insomnia in ESRD patients is likely to be higher than those in patients with idiopathic RLS, and ESRD patients have a higher rate of periodic limb movements during sleep compared with idiopathic RLS patients. As for treatment, dopaminergic drugs are thought to be the first line treatment in uremic RLS, as is the case for idiopathic RLS. However, drugs which are eliminated renally should be contraindicated in ESRD patients. In addition, we should consider whether the drug can suppress RLS symptoms both at night and while undergoing haemodialysis when the symptoms are likely to worsen.