

## Prevalence of Restless Leg Syndrome and Related Factors in Patients under Chronic Hemodialysis

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**R**estless leg syndrome (RLS) or Ekbom syndrome is a sensory motor disorder with shaking legs and sometimes other parts of body. This unpleasant sensation is more common during sitting and lying particularly in the knees, ankles and depth of internal surface of legs [1]. The prevalence of this syndrome was reported 61.5% by Molahosseini et al. which is less than this study (67.2%) [2]. Soyoral et al. demonstrated that there is no significant relation between serum creatinine levels and the prevalence of restless leg syndrome [3]. This cross-sectional descriptive study was performed on 260 hemodialysis patients referred to dialysis department of Shahid Rahnamoon hospital of Yazd in 2012.

The 27.5% were 50-60 years-old and the 8.6% were 40-50 years-old (57.7% male vs. 42.3% female). In this study 45.7% were hemodialysed for 10-15 hours per week whilst 37.1% and 17.2% were hemodialysed 15-20 hours and 10 hours per week respectively. As diagnostic criteria, 67.2% of patient suffered from restless leg syndrome, and 28% reported positive family history of RLS. The results showed that there is no significant association between the amount of iron and restless leg syndrome. Also serum creatinine levels did not correlate with the prevalence of restless leg syndrome. However blood group, particularly type

A can have an impact on the prevalence of RLS. The other hand, there was no significant relation between blood biochemical factors such as serum iron, urea, calcium, phosphorus, potassium, creatinine, TIBC, TIBC/Iron levels and restless leg syndrome. So, we can conclude that restless leg syndrome should be considered in all patients under chronic hemodialysis and effective therapeutic interventions be performed to improve their quality of life (QoL).

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### References

1. Walters AS. Toward a better definition of the restless legs syndrome. *Mov Disord* 1995; 10(5): 634-642.
2. Mollahosseini S, Mohammadzadeh S, Kamali P and Tavakoli-Shooshtari M. Frequency of sleep disorder and restless legs syndrome in hemodialysis patients referred to hospitals in Tehran university of medical sciences in 2003. *Med Sci J Islamic Azad Univ Tehran Med Branch* 2005; 15(1): 27-30.
3. Soyoral Y, Sayarlioglus H, Tuncel D, et al. Prevalence and risk factors of restless leg syndrome in a single hemodialysis unit. *Turk J Med Sci* 2010; 40(3): 443-446.