LETTER TO THE EDITOR / EDİTÖRE MEKTUP



Restless leg syndrome: Does geographic area have any effect on prevalence?

Huzursuz bacak sendromu: Coğrafi alanın prevalans üzerine herhangi bir etkisi var mıdır?

Behzad EINOLLAHI, Aidin LOTFIAZAR, Mohsen MOTALEBI

Dear Editor,

We read with great interest the article by Tekdos Demircioğlu et al. entitled "Relationship between restless leg syndrome and quality of life in uremic patients," published in your esteemed journal.^[1] They evaluated the prevalence of restless leg syndrome (RLS) and its relationship to quality of life, sociodemographic data and laboratory data in 118 hemodialysis (HD) patients.

Tekdos Demircioğlu et al. found that the prevalence of RLS among patients undergoing HD was high (41%).^[1] In addition, a review article noted the prevalence of "uremic RLS" was approximately 30% in endstage renal disease (ESRD) patients.^[2] However, its prevalence in this group ranged between 6.6% and 80% in various reports.^[3-5] Based on the International RLS Study Group (IRLSSG) criteria, an RLS prevalence of 33% has been reported in ESRD patients, which is greater than the normal population (3%–15%);^[6,7] however, a study in Singapore showed lower prevalence in normal Asian population (0.1%–0.6%). ^[8] Another study showed a significant difference in prevalence of RLS in Caucasians vs African-Americans (68% vs 48%).^[9] We have observed a prevalence rate of 31.7% in Iran.^[10] Thus, it seems this variation in prevalence may be due to geographic and racial differences, as well as diversity in lifestyle and in criteria, and physicians' experience diagnosing RLS.

It is of interest that there was no correlation between RLS, demographic characteristics, and anemia in the

Demircioğlu et al. study.^[1] We also found no significant relationship between them in our study of 397 HD patients.^[10] We did find a significant correlation between endocrine glandular disorders and antihypertensive drugs (p=0.03 and p=0.01, respectively) with RLS, which Demircioğlu et al. did not look at in their study.^[1]

Several studies have demonstrated indicative association between RLS and higher risk of nocturnal hypertension, heart disease and stroke, as well as association with other sleep disturbances that could lead to anxiety and depression.^[11] It can be concluded that the higher level of antihypertensive drugs in patients with RLS may be related to sleep disorders secondary to RLS, which lead to hypertension.

Finally, RLS is a common disorder in HD patients that affects sleep quality and quality of life; physicians must also consider it in ESRD patients.

References

- 1. Tekdöş Demircioğlu D, Kavadar G, Esen Öre Ö, Emre TY, Yaka U. Relationship between restless leg syndrome and quality of life in uremic patients. Agri 2015;27(2):73–8.
- 2. Giannaki CD, Hadjigeorgiou GM, Karatzaferi C, Pantzaris MC, Stefanidis I, Sakkas GK. Epidemiology, impact, and treatment options of restless legs syndrome in end-stage renal disease patients: an evidence-based review. Kidney Int 2014;85(6):1275–82. Crossref
- 3. Hui DS, Wong TY, Ko FW, Li TS, Choy DK, Wong KK, et al. Prevalence of sleep disturbances in chinese patients with end-stage renal failure on continuous ambulatory peritoneal dialysis. Am J Kidney Dis 2000;36(4):783–8. crossref

Nephrology and Urology Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran Submitted (*Başvuru tarihi*) 07.07.2015 Accepted after revision (*Düzeltme sonrası kabul tarihi*) 24.07.2015

Correspondence: Dr. Aidin Lotfiazar. Nephrology and Urology Research Center, Baqiyatallah University of Medical Sciences, Molla Sadra Ave, Vanak Sq. Tehran, Iran.

Tel: +98 - 912 - 297 57 65 e-mail: aidinlotfiazar@yahoo.com

© 2016 Türk Algoloji Derneği



- 4. Bhowmik D, Bhatia M, Gupta S, Agarwal SK, Tiwari SC, Dash SC. Restless legs syndrome in hemodialysis patients in India: a case controlled study. Sleep Med 2003;4(2):143–6.
- 5. Salman SM. Restless legs syndrome in patients on hemodialysis. Saudi J Kidney Dis Transpl 2011;22(2):368–72.
- 6. Kathy P, Mark U. ERSD patient handout, patient guide to End-Stage Renal Disease (ESRD) and RLS. Night Walkers 2008. p. 21–2.
- Al-Jahdali HH, Al-Qadhi WA, Khogeer HA, Al-Hejaili FF, Al-Ghamdi SM, Al Sayyari AA. Restless legs syndrome in patients on dialysis. Saudi J Kidney Dis Transpl 2009;20(3):378–85.
- 8. Tan EK, Seah A, See SJ, Lim E, Wong MC, Koh KK. Restless legs syndrome in an Asian population: A study in Singapore. Mov Disord 2001;16(3):577–9. Crossref
- 9. Kutner NG, Bliwise DL. Restless legs complaint in African-American and Caucasian hemodialysis patients. Sleep Med 2002;3(6):497–500. Crossref
- Chavoshi F, Einollahi B, Sadeghniat Haghighi K, Saraei M, Izadianmehr N. Prevalence and sleep related disorders of restless leg syndrome in hemodialysis patients. Nephrourol Mon 2015;7(2):24611. Crossref
- 11. Einollahi B, Izadianmehr N2. Restless leg syndrome: a neglected diagnosis. Nephrourol Mon 2014;6(5):22009. Crossref