Restless legs syndrome prevalence and quality of life in patients with inherited blood disorders

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Introduction

Beta thalassemia is a common blood disorder worldwide with high incidence in countries around the Mediterranean, in North Africa, the Middle East, India, Central and Southeast Asia. Over the years, several reports have demonstrated involvement of the nervous system in beta thalassemia patients. Neurological complications have been attributed to various factors such as chronic hypoxia, bone marrow expansion and iron overload neurotoxicity. In most cases, neurological abnormalities do not initially present with relevant signs or symptoms and can only be seen during neurophysiological examination.

Objective

In the present study the aim was to explore the prevalence of a neurological disorder called restless legs syndrome (RLS) and the levels of quality of life of beta thalassaemia patients suffering from RLS compared to those without the syndrome according to age, sex, and severity and complications of the disease.

Methods

A cross-sectional descriptive study was conducted. One hundred and fourteen beta thalassemia patients (age 40 ± 11yr, 59M/59F) participated in the study. Patients were screened for RLS based on the four international RLS study group diagnostic criteria while the severity of RLS symptoms was evaluated using the IRLSSG severity scale. Quality of life was evaluated using the SF36 questionnaire, while other aspects of physical and mental health were assessed by a battery of validated questionnaires.

Results

The prevalence of RLS in beta thalassemia patients was zero. None of the patients were diagnosed with RLS defined using the four essential diagnostic criteria. The quality of life score was low (78 ± 18) and it was associated with haemoglobin levels, fatigue, depression and sleep quality. Iron levels were within normal range (191 ± 66 mcg/dL) while ferritin levels were high as expected (1836 ± 225ng/dL).

Conclusion

Our sample of patients comes from central Greece where the prevalence of RLS in the general population has been found to be 4%. To our surprise there was no presence of RLS in our patients with beta thalassemia. The adequate levels of iron and ferritin often seen in these patients could be the reason of the low prevalence of RLS.