

Abstract

Background

Restless Legs Syndrome (RLS) is a common sensorimotor disorder characterized by an urge to move, predominantly at rest and in evening hours. Despite the distress and impairment in quality of life, it remains as an under-recognized condition. Available studies showed close relationship between RLS and psychiatric disorders in general population. Further studies on RLS in psychiatric populations would help characterizing RLS in this special group, increase clinician awareness and improve management outcome.

Objectives

To investigate the prevalence and clinical correlates of Restless Legs Syndrome in a Chinese psychiatric population.

Methodology

This was a cross-sectional prevalence study comprising of 2 phases. Adult Chinese psychiatric outpatient subjects were included. In Phase I, subjects completed an RLS screening questionnaire, the Cambridge-Hopkins Restless Legs Syndrome Diagnostic Questionnaire Short Form (CH-RLSq13). In addition, subjects completed the Insomnia Severity Index (ISI), a quality of life assessment EQ-5D, and a questionnaire on demographics and sleep symptoms. Global Assessment of Functioning (GAF) was scored by the attending clinicians. In Phase II, about 50% of each group of screen positive and negative subjects were invited to return for face-to-face clinical interview using the Hopkins Clinical Diagnostic Interview (HCIDI) to ascertain the diagnosis of RLS. Comorbid psychiatric disorders were assessed by the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I/P). Severity of psychiatric symptoms were assessed by the Hospital Anxiety and Depression Scale (HADS) and the Brief

Psychiatric Rating Scale (BPRS). Suicide history was assessed by the Columbia Suicide Severity Rating Scale (C-SSRS). Akathisia and extrapyramidal side effects from psychotropics were assessed by the Barnes Akathisia Rating Scale (BARS) and the Simpson Angus Scale (SAS) respectively. Severity of RLS was assessed by the International Restless Legs Syndrome Study Group Rating Scale (IRLS). The physical and drug history were obtained by case note review. The sensitivity and specificity of the CH-RLSq13 were analyzed with the Phase II results.

Results

505 subjects (response rate 72.9%) completed Phase I, and 133 subjects (response rate 74.7%) completed Phase II. 44 subjects were diagnosed to suffer from RLS by the HCIDI. Weighted prevalence of RLS was 33.0%. It was about twice as common in female. Mean age of onset was 36.9 years (SD 12.9 years). About 12% of all Phase II subjects reported onset of RLS symptoms after psychotropics use, which accounted for 36.4% of all RLS cases. Of all RLS subjects, 34 (77.3%) had symptoms of at least moderate severity, which warrants clinical attention and treatment. Stretching sensation and dull ache were the most common sensory symptoms of RLS. RLS was associated with increased risk of anxiety disorders, in particular, agoraphobia (adjusted OR 3.34, 95% CI 1.29-8.68). RLS was an independent risk factor for lifetime suicide attempts (adjusted OR 2.73, 95% CI 1.21-6.18) and lifetime suicide ideas (adjusted OR 2.43, 95% CI 1.00-5.93), after adjusting for age, sex and comorbid psychiatric disorders. RLS subjects had higher risk of suffering from current akathisia (OR 16.19, 95% CI 4.39-59.70). The presence of RLS was associated with more severe psychopathology and non-remission. Severity of RLS correlated with higher scores in ISI, HADS and BPRS. Conversely, severity of RLS correlated with lower scores in EQ-5D and GAF. There was no difference in physical illness, pregnancy history and pattern of psychotropic use between RLS

and non-RLS subjects.

Conclusions

Restless Legs Syndrome was associated with higher risks of agoraphobia, lifetime suicide attempts, and current akathisia symptoms. Severity of RLS correlates with more severe psychopathology and poorer quality of life.

Keywords

Restless Legs Syndrome; Chinese; prevalence; psychiatric disorder; psychotropic; akathisia; quality of life; suicide