

PROGNOSTIC MARKERS AND CRITERIA FOR THE DEVELOPMENT OF SECONDARY RESTLESS LEGS SYNDROME

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<https://doi.org/10.5281/zenodo.18582597>

Summary. Restless legs syndrome (BOS) is a common neurological disorder characterised by discomfort in the legs and a strong need to move the legs, especially at rest and in the evening. According to international studies, the primary form of CKD occurs in 7-10% of the adult population, while secondary CKD develops against the background of various somatic diseases and conditions.

Keywords: diseases of the peripheral nervous system, functional disorders, Restless legs syndrome, neurology

The purpose of the study is to study the clinical features of secondary restless legs syndrome, to determine informative diagnostic criteria based on a comprehensive assessment of clinical, neurological, instrumental, neuroimaging, and laboratory data, and to establish prognostic indicators of the course of the disease.

Clinical data of 121 patients with secondary restless legs syndrome (SBS), examined in inpatient and outpatient settings of neurological departments, were used as the research material. According to the study design, three groups were formed: the 1st (main) group consisted of 43 patients with Parkinson's disease with restless legs syndrome, which corresponded to 35.5% of the total number of examined patients; The 2nd group (comparison group) consisted of 78 patients (64.5%) with secondary CKD without Parkinson's disease, of which 46 patients (38.0%) had a sporadic form of CKD and 32 patients (26.5%) had a neuropathic form of CKD; The 3rd (control) group consisted of 48 practically healthy volunteers, comparable in sex and age. Among patients with CVD, there were 73 women (60.3%), 48 men (39.7%), in the control group there were 27 women (56.3%), 21 men (43.7%). The age of the patients ranged from 30 to 60 years, the average age was 47.2 ± 6.8 ; the average age in the main group was 49.1 ± 5.9 , in the comparison group - 45.8 ± 6.4 , in the control group - 46.5 ± 5.7 . The diagnosis of restless legs syndrome was established in accordance with the criteria of the International Group on the Study of Restless Leg Syndrome and was coded according to ICD-10 as G25.81, Parkinson's disease - G20, polyneuropathy of various origins - G62. The inclusion criteria in the study were the presence of clinically confirmed secondary restless legs syndrome, informed consent of a patient aged 30 to 60 years to participate in the study; exclusion criteria were primary (idiopathic) CKD, severe cognitive impairments, severe somatic pathology in the stage of decompensation, mental disorders, organic spinal cord injury,

and severe vertebrogenic syndromes. Depending on the etiological factor, the patients were divided into subgroups: 43 (35.5%) with CVD against the background of Parkinson's disease, 32 (26.5%) with CVD of neuropathic genesis, 46 (38.0%) with CVD of a sporadic nature. The distribution of patients by disease duration was as follows: 29 (24.0%) patients with a disease duration of up to 1 year, 47 (38.8%) patients with a disease duration of 1 to 3 years, and 45 (37.2%) patients with a disease duration of more than 3 years. By type of clinical course, sensory-motor forms of CVD prevailed in 69 (57.0%), sensory forms in 31 (25.6%), mixed clinical variants in 21 (17.4%) patients.

Research results. In the clinical and neurological examination of patients with secondary restless legs syndrome, the leading complaints were in the form of discomfort in the legs at rest, mainly in the evening and at night, ant crawling, stabbing, burning, internal tension, and the need for movement. In the main group (patients with Parkinson's disease and CKD), these complaints were noted in 100% of the examined, in the comparison group in 96.2% of patients, while in the control group such feelings were absent. Sleep disturbances in the form of difficulty sleeping and frequent night wakings were noted in 88.4% of patients in the main group and in 79.5% of patients in the comparison group, and in 12.5% of patients in the control group. In objective neurological examination, combined sensorimotor disorders prevailed in patients of the main group: changes in superficial sensitivity by type of hypesthesia in the distal parts of the lower extremities were detected in 58.1% of patients, in the comparison group - 46.2%, in the control group - 6.3%. Deep sensory disturbances were noted in 41.9% of patients in the main group and in 34.6% of patients in the comparison group, not detected in the control group. Motor disorders in the form of decreased distal muscle strength

CONCLUSIONS: Secondary restless legs syndrome is characterized by clinical polymorphism with a predominance of sensory complaints, sleep disturbances, and combined sensorimotor disorders, more pronounced in patients with Parkinson's disease and neuropathic forms of the disease. Clinical and neurological manifestations of secondary restless legs syndrome are significantly correlated with instrumental research methods, primarily with electroneuromyography indicators and structural changes according to magnetic resonance imaging. Laboratory indicators of iron metabolism, in particular, a decrease in serum iron and ferritin levels, are significant biochemical markers of secondary restless legs syndrome and are associated with the severity of clinical symptoms and sleep disturbances. A prognostic assessment of the course of secondary restless legs syndrome using ROC analysis showed the high informativeness of a comprehensive model that includes clinical data, ENMG indicators, and iron metabolism parameters, allowing for the identification of patients at risk of severe and progressive disease progression.

1. A comprehensive clinical, instrumental, and laboratory approach using prognostic methods ensures increased accuracy in diagnosing secondary restless legs syndrome and can be used to stratify patients based on the risk of adverse outcomes.

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