Prevalence and clinical peculiarities of Multiple Sclerosis in the Republic of Moldova

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Abstract

Background: Multiple sclerosis (MS) is a chronic autoimmune, inflammatory, neurodegenerative disease of the central nervous system and the most common disabling neurological disease in young adults. The disease natural evolution is almost not affected by the use of the disease modifying drugs. In this regard, the investigation of MS epidemiology in the Republic of Moldova is of raising importance. The purpose of this study is to update the information about the prevalence and demographic characteristics of MS at the country level as well as to determine the onset symptoms, clinical peculiarities and disability ratio.
Material and methods: The study included patients with clinical and imagistic defined forms of MS according to the McDonald 2017 criteria. Data collection included records analysis of MS patients diagnosed and treated by the neurologists from all regional hospitals at the country level, archives investigation of republican diagnostic centers as well as the analysis and assessment of the administrative records.
Results: As per December 31st, 2019, in the researched area of the country, 1542 MS patients were registered. Thus, a crude estimated prevalence is 34.0 per 100000 inhabitants (95% CI: 32.8 – 37.1). The female to male ratio was 1.9:1, with the mean age 42.0 years. The clinical peculiarities at the onset of the disease for various clinical subtypes were analyzed in relation with clinical spectrum of the first attack, sex distribution and disability ratio.
Conclusions: The estimated prevalence of multiple sclerosis in the Republic of Moldova is 34.0 per 100000 inhabitants. This proved to be lower than in European countries. More studies are needed for knowledge gathering of epidemiological and clinical data concerning MS prevalence in the country. Thus, the creation of the MS Registry of the Republic of Moldova is of mandatory importance.
Key words: multiple sclerosis, epidemiology, prevalence.

Four years' experience of participation of the Republic of Moldova in the RES-Q Registry

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Abstract

Background: The Republic of Moldova is a member of the Registry of Stroke Care Quality (RES-Q) project, initiated by the European Stroke Organization in 2016. The aim of this study was to analyze the in-hospital stroke care indicators for a period of 4 years in Moldovan hospitals according to the data of the RES-Q registry.
Material and methods: 15 hospitals treating stroke patients participated in the study. Each hospital registered at least 30 consecutive stroke patients for at least 1 month per year. The period of patients' data collection included the period from 2017 to 2020. The RES-Q statisticians processed the online data collection.
Results: The data of 2085 patients were analyzed with the mean age of 68 years, 51% were men. CT image was performed for 84% of patients and only 48% of them received it in the first hour after admission. The rtPA and/or thrombectomy was applied to 3% of all stroke patients. The carotid artery imaging was performed in 40% of cases. The in-hospital stroke mortality was 18%, mainly in tertiary hospitals. At discharge, 96% of patients were prescribed antiplatelet drugs, 84% – antihypertensive, 41% – statins, and 45.5% – anticoagulants for patients with atrial fibrillation.
Conclusions: Four-year monitoring of the in-hospital stroke care indicators revealed important deficiencies in the process of diagnosis and treatment of the acute stroke, mainly in rural hospitals. Immediate measures are needed to reorganize the stroke care service in Moldova.
Key words: stroke, registry, in-hospital quality indicators.