

The impact of the pandemic on the in – hospital stroke quality indicators based on the RES-Q Register

*^{1,2}Elena Serebreanschi, ¹Elena Manole, ²Olesea Odainic, ^{1,2}Vitalie Lisnic

¹Department of Neurology No 1, *Nicolae Testemitanu* State University of Medicine and Pharmacy

²*Diomid Gherman* Institute of Neurology and Neurosurgery, Chisinau, the Republic of Moldova

*Corresponding author – Elena Serebreanschi. E-mail: helenser@mail.ru

Abstract

Background: Coronavirus pandemic (COVID-19) has influenced not only global morbidity statistics, but also healthcare ones in relation to other diseases, including stroke. The aim of the study was to analyse the in-hospital quality indicators in patients with acute stroke during the pandemic based on the data of the RES-Q (*Registry of Stroke Care Quality*).

Material and methods: A retrospective analysis of all consecutive acute stroke patients from the Institute of Neurology and Neurosurgery of the Republic of Moldova was performed. The data collection included 1 month (March) comparative analysis in 2019 and 2020 of online registration, processed by the Statistic Department of the RES-Q platform.

Results: The study included 133 patients: 70 – from 2019 and 63 – from 2020, the mean age 68 ± 2 years, the mean NIHSS – 9 p. In 2020 there were more hospitalized women (57% vs 45%), more patients with haemorrhagic stroke (31% vs 25%), those needed treatment in the Intensive Care Unit (ICU) (41% vs 33%) and put on ventilator (29% vs 13%), and increased number of deceased (26% vs 20%). The number of brain CT imaging (99% vs 98%) and thrombolysis performed (3% vs 4%) did not show major differences.

Conclusions: The quality of the in-hospital stroke care was not dramatically affected by the pandemic. The delay in seeking medical care increased the number of patients requiring ICU placement and resulted in a higher number of deaths.

Key words: stroke quality indicators, register, COVID-19.

Epidemiological data on Myasthenia gravis related to SARS-COV-2 infections in the Republic of Moldova

*^{1,2}Vitalie Lisnic, ^{1,2}Ana-Maria Bubuic, ³Paulo Emilio Alboini, ³Maurizio Angelo Leone

¹Department of Neurology No 1, *Nicolae Testemitanu* State University of Medicine and Pharmacy

²*Diomid Gherman* Institute of Neurology and Neurosurgery, Chisinau, the Republic of Moldova

³Neurology Unit, Fondazione IRCCS Casa Sollievo della Sofferenza, 71013 San Giovanni Rotondo, Italy

*Corresponding author – Vitalie Lisnic. E-mail: vitalie.lisnic@usmf.md

Abstract

Background: The aim of this study is to provide an estimated incidence of Myasthenia Gravis (MG) and to describe the pattern of the disease in the Republic of Moldova before and during the COVID-19 pandemic.

Material and methods: Multiple epidemiological sources were explored prospectively and retrospectively. The date the SARS-CoV-2 infection (March 11, 2020) was declared a pandemic was used as a reference and the data gathered the previous and the next year were compared and analyzed.

Results: During the time March 11, 2020 – March 11, 2021 – 28 new cases of MG were ascertained yielding a crude incidence rate of 10.6 per million persons-years (95% CI 6.7 – 14.5), 13.1 in women (95% CI 7.1 – 19.1) and 7.8 in men (95% CI 3 – 12.6) (F:M ratio of 1.6:1). The mean age of onset was 49.8 years (43.2 in women and 62.7 in men). Only 5 thymectomies were performed. Two deaths of previously diagnosed MG patients were registered, including one associated with the SARS-CoV-2 infection. In the time period March 11, 2019 – March 10, 2020 – 26 new cases of MG were identified yielding a crude incidence rate of 9.67 per million persons-years (95% CI 5.96 – 13.38), 12.11 in women (95% CI 6.41 – 17.81) and 7.01 in men (95% CI 2.51 – 11.51) (F:M ratio of 1.7:1). The mean age of onset was 45.6 years. 17 thymectomies were performed.

Conclusions: During the COVID-19 pandemic, the incidence of MG was not significantly higher than the year before. However, patient management and hospital care have been markedly impacted.

Key words: myasthenia gravis, epidemiology, prevalence.