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ЧАСТОТА ИНСУЛЬТОВ И ТЕНДЕНЦИИ ИЗМЕНЕНИЯ СМЕРТНОСТИ В КАУНАСЕ, ЛИТВЕ

Аннотация: целью настоящего исследования было изучить тенденции инсульта у городского населения Литвы среднего возраста в период с 1986 по 2012 год. Все случаи инсульта в исследуемой популяции были установлены и подтверждены в соответствии со стандартизованными критериями, изложенными ВОЗ MONICA Проект. Результаты нашего исследования указывают на снижение смертности и летальности от инсульта, увеличение рецидивов инсульта, в то время как показатели заболеваемости инсультом среди каунасских мужчин и женщин среднего возраста в течение последних двух десятилетий оставались стабильными.

Ключевые слова: инсульт, Литва, демографическое исследование.

STROKE INCIDENCE AND MORTALITY TRENDS IN KAUNAS, LITHUANIA

Abstract: the aim of the present study was to explore the longitudinal stroke trends in the middle-aged Lithuanian urban population during the period of 1986

through 2012. All stroke events in the studied population were ascertained and validated according to the standardized criteria outlined by the WHO MONICA Project. Findings from our study indicate declining in the mortality and case fatality of stroke, increasing attack rates and recurrence of stroke, meanwhile incidence rates of stroke were stable among middle-aged Kaunas men and women during past two decades.

Keywords: *stroke, Lithuania, population study.*

Introduction. Stroke trends in different socioeconomic regions of the world have different patterns and age-standardized incidence of stroke significantly decreased by 12% in high-income countries, and increased by 12% in low-income and middle-income countries, though non-significantly from 1990 to 2010 [1]. Mortality rates decreased significantly in both high income (37%) and low-income and middle-income countries (20%) [1–2]. Although age-standardized mortality rates for ischemic and hemorrhagic stroke have decreased in the past two decades, the absolute number of people who have these stroke types annually, and the number with related deaths, is increasing, with most of the burden in low-income and middle-income countries [2].

In general, the trends in stroke incidence and mortality rates have decreased in the recent decades for high-income countries such as USA, Canada, the United Kingdom, Sweden, Spain, etc [3]. The decline in stroke mortality over the past decades, a major improvement in population health observed for both sexes and all race and age groups, has resulted from reduced stroke incidence and lower mortality rates and the percentage of stroke hospitalizations resulting in death decrease over the last decade likely reflecting advancements in acute stroke care.

Materials and Methods. The study was conducted in Kaunas city, Lithuania. All suspected acute stroke events are recorded on special forms translated from the Stroke Events Registration Form of the WHO MONICA project [4]. According to the WHO MONICA protocol, stroke was defined as ‘«rapidly developed clinical signs of focal (or global) disturbance of cerebral function lasting more than 24 hours (unless interrupted by surgery or death) with no apparent cause other than a vascular origin’».

Differences in rates at the level of $p < 0.05$, using a two-tailed test, are reported as statistically significant.

Results. During the 27-year study period, 9,992 stroke events were registered among 25–64 year old males and females in Kaunas city. The overall proportion of recurrent events was 25.7%. Overall, 1,889 (18.9%) events (1,132 (20.0%) in men, and 757 (17.4%) – in women) were fatal within 28 days. In men, 53.7% of all deaths from stroke were due to ischemic stroke (IS), 33.5% from intracerebral haemorrhage (ICH), and 11.3% from subarachnoid hemorrhage (SAH). In women, the majority of all deaths from stroke were due to hemorrhagic strokes (ICH and SAH taken together) – 58.3%. Deaths from ischemic strokes comprised 40.2%.

Discussion. A systematic review of population-based studies showed, that over the past four decades stroke incidence rates in high-income countries decreased by 42%, whereas in low to middle income countries the stroke incidence rates increased in averaged 2.3 times [5]. Among Kaunas middle-aged men and women incidence rates of stroke were without significant changes.

Conclusion. During 1986 to 2012, among Kaunas middle-aged men and women incidence rates of stroke were without significant changes, but the attack rates and recurrence rates of stroke in Kaunas men and women were increasing. Mortality rates from all strokes among Kaunas men and women were declining, like case-fatality rates from stroke in Kaunas population aged 25–64 years.

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