Мозочен удар и деменција

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Абстракт

Повеќето нови студии сугерираат дека ризик факторите за когнитивни пореметувања и деменција се истите оние како за цереброваскуларните болести: дијабет, хипертензија, срцеви заболувања, холестерол, пушење, алкохол и др. Во трудот се обработени 60 пациенти со мозочен удар, лекувани на Универзитетската Клиника за Неврологија во Скопје. Васкуларните ризик фактори (ВРФ) се проценети според стандардизиран прашалник. Когнитивните промени се квантифицирани една година по ударот со помош на Мини Ментал Скалата (ММСЕ) и други невропсихолошки тестирања. За дијагноза на васкуларната деменција се користени критериумите на МКБ-10. Пациентите се евалуирани во период од една година, и после мозочниот удар 44% од испитаниците имале когнитивни пореметувања а 11% развиле деменција. Кај овие пациенти застапеноста на ВРФ била: со дијабет 40% од испитаниците, хипертензија 72%, срцеви заболувања 35%, покачен холестерол 37%, алкохол консумирале 40% додека 52% пушеле цигари. Хипертензијата се покажа како статистички најзначаен ВРФ за когнитивните пореметувања и васкуларната деменција. Присуството на повеќе ВРФ е поголем ризик за појава на когнитивни пореметувања и деменција. Од тука произлегува дека навременото откривање и третман е важно во превенцијата на мозочниот удар како и за превенција на когнитивните пореметувања и деменција кои се јавуваат кај пациенти со предходен мозочен удар.

Клучни зборови: васкуларни ризик фактори, мозочен удар, когнитивно пореметување, деменција.

Stroke and dementia

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Abstract

More data suggest that risk factors for cognitive disorders and dementia are the same as for cerebrovascular diseases: diabetes, hypertension, heart disease, cholesterol, smoking, alcohol and more. The study analyzed 60 patients with stroke treated at the Clinic of Neurology in Skopje. Vascular risk factors (VRF) were evaluated according to standardized questionnaire. Cognitive changes are quantified one year after stroke using the Mini Mental Scale (MMSE) and other neuropsychological tests that we use in practice at our Clinic. For the diagnosis of vascular dementia we used the criteria of ICD-10. One year after the stroke 44% of stroke patients had cognitive disorders and 11% developed dementia. In these patients, the prevalence of VRF was: diabetes 40% of patients, 72% hypertension, and heart disease 35%, high cholesterol 37%, 40% consumed alcohol and 52% smoked cigarettes. The biggest statistical confirmed correlation between VRF and cognitive disorders were for hypertension. The risk of cognitive disorders and dementia was higher when the patient is present more VRF. Their timely detection and treatment is important in the prevention of stroke and in the prevention of cognitive disorders and dementia occurring after him.

Keywords: vascular risk factors, stroke, cognitive impairment, dementia.

roduction

Dementia is one of most common diseases in lder persons. Its prevalence doubles every 5 years fter age 65 (1.2). Vascular dementia (VAD), the econd leading cause of dementia after Alzheimer's isease (AD), is an important cause of chronic dis-ibility. It is caused by a disorder of cerebral circula-ion and not a part of normal aging. Usually occurs fter stroke (3, 4). It is assumed that risk factors for ognitive disorders and dementia in stroke patients re the same as for cerebrovascular diseases: diabe-es, hypertension, heart disease, cholesterol, smok-ng, alcohol, etc. (5, 6). The increasing age, lower ducational level and cortical atrophy associated vith increased risk of dementia in patients with troke. Heredity also been tested as a risk factor for /AD: ∈4 allele of Apo lipoprotein (Apo) E gene is ssociated with a higher risk of Alzheimer's disease nd vascular dementia (7).

Purpose

To assess the impact of vascular risk factors n cognitive status in patients with stroke.

Material And Methods

In this prospective study were analyzed 60 atients treated at University Clinic for Neurolo-y with diagnosis cerebrovascular stroke (cere-ral thrombosis or embolism, cerebral and sub-rachnoid hemorrhage). The patient's age was in ange 40-80 years, with almost equal representa-ion of both sexes. The survey included only ran-lomized patients with cerebrovascular stroke, irst detected by CT or MRI, who were then ap-ropriately treated and controlled. The study ex-luded patients with disorders of consciousness, phasia or severe dysphasia. The test also exclud-d patients who had a history of previous data for ognitive disorders or dementia (to exclude the ossibility of Alzheimer's pathology associated r mixed dementia). Risk factors were evaluat-d according to standardized questionnaire. The ssessment of cognitive function can be moni-ored through multiple clinical scales allowing a lobal quantification of the deficit and a means f characterizing the degree of cognitive decline n patients. Among mostly used scale and for this urpose was the Mini Mental Status Examination MMSE). The scale includes 30 questions, esti-nating the orientation, remembering, attention nd calculation, memory, naming, repetition, comprehension, reading, writing and re-draw-ng of complex figure (8). For patients who have a low score of the MMSE, we applied battery of neuropsychological tests: Wechsler individual intelligence test (VITIM), Wechsler test for auditory verbal learning and memory (RAVLT) and Ray-Osterit complex figure (RKF). For the diagnosis of vascular dementia we used the criteria of ICD-10 and Diagnosis and Statistical Manual of Mental Disorders. Fourth Edition. Text Revision (DSM-IV) (8). Methods of statistical data processing for statistical data analysis program was used Statistic for Windows 7, 0. The distribution of continuous variables was performed with measures of central tendency (mean) and measures of variability (standard deviation). To test the significance of difference between certain distributions analyzed parameters were used certain tests: X2 test for one and two samples, Kolmogorov-Smirnov D test for one and two samples, Kruskal-Wallis H test for more than two copies.

Results

The distribution of patients according to sex and age are presented in table 1.

Age	Male (%)	Female(%)
<40	1,9	/
41-50	7,6	6,4
51-60	28,1	25,6
61-70	37,3	42,7
>70	25,1	25,3

Table 1. Distribution of respondents by sex and age

In figure 1 is presented distribution by sex with insignificant higher distribution in male.

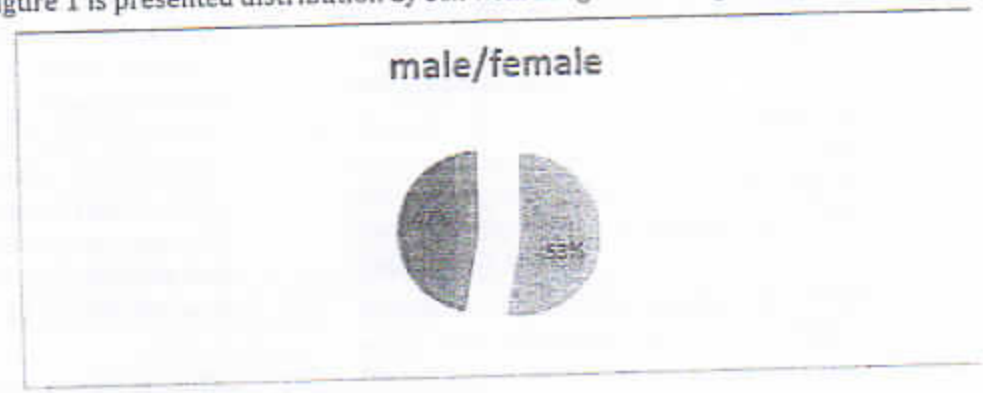

Figure 1. Distribution by sex (male, female)

One year after the stroke 44% of patients had cognitive disorders and 11% developed dementia. The results are presented in figure 2.

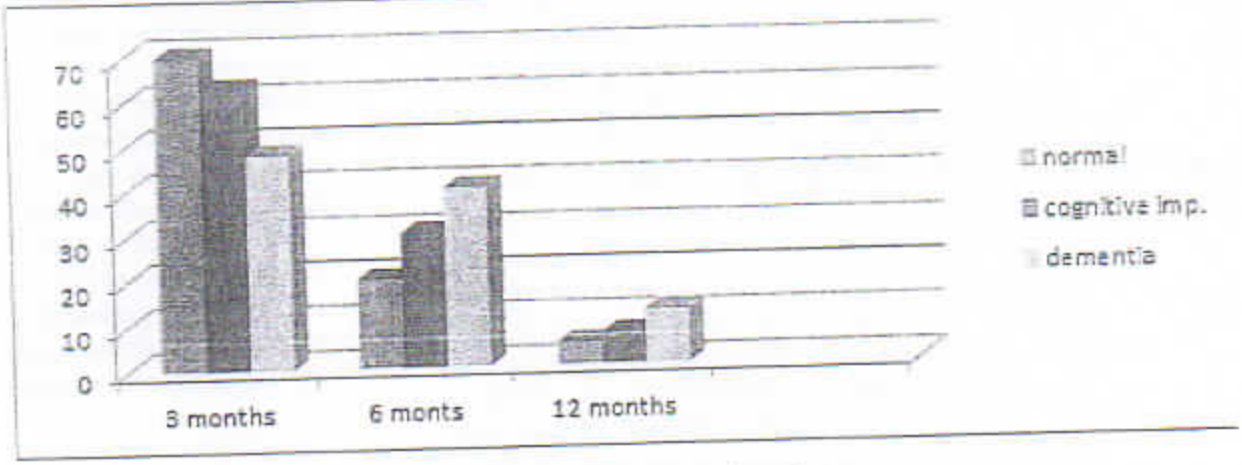

Figure 2. Cognitive status after 3, 6 and 12 months in post stroke patients

In table 2 is presented distribution of risk factors in to a both groups: with cognitive disorders and dementia.

Risk factors	Cognitive impairments (%)	Dementia (%)
Diabetes mellitus	24	39
HTA	61	73
Hart failure	30	41
High cholesterol	38	38
Smoking	31	52
alcohol	25	41

Table 2. Distribution of risk factors in post stroke patients with cognitive disorders and dementia.

Discussion

The presence of cognitive impairment after 3 months was 23%, after 6 months was 30% and after 12 months was 40%. Dementia developed after 3 months (5%), 6 months (7%) and in 12 months (12%) patients, is a striking figure. These data favor the hypothesis that mild cognitive impairment usually occur in the first 6 months after stroke and dementia for up to 1 year. The distribution of risk factors was 24% of patients were diabetic, 25% drink alcohol, 30% suffer from heart disease, 31% were smokers, 38% had high cholesterol levels and most of them, and 61% have a positive a history of high blood pressure. Hypertension occurs more significant risk factor for stroke (p>0, 05) statistically insignificant. Vascular dementia with a history of stroke smokers probably will get 6, 01 times more compared to non-smokers. The link between smoking and vascular dementia is statistically significant level significance of p <0.05.

Consumption of alcohol in patients of stroke 6.6 times significantly increases the chance to get vascular dementia compared with those who did not drink alcohol. The biggest statistical confirmed correlation between risk factors and cognitive disorders was lowest for hypertension and cholesterol. The risk of cognitive disorders and dementia increases proportionately with an increase in the number of vascular risk factors present in the patient (9). Their timely detection and treatment is important in the prevention of stroke and in the prevention of cognitive disorders and dementia occurring after him. The treatment of individual VRF including hypertension, diabetes and hypercholesterolemia is associated with a reduced risk of vascular dementia (10, 11).

Conclusion

The vascular risk factors are important in the occurrence of stroke and cognitive disorders and dementia. The risk of cognitive disorders and dementia increases proportionately with an increase in the number of vascular risk factors present in the patient.

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