

Patient Demographics in Haemorrhagic and Ischaemic Stroke

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ABSTRACT: At present, the cerebral circulation disorder is caused by various factors. According to the Ministry of Health of the Republic of Uzbekistan, 62876 cases of strokes were registered in Uzbekistan in 2019. 15% acquired lethal outcome, 10-15% returned to their previous state, 55 - 70% became disabled. Stroke is translated from the Latin language as a "stroke" which means an acute cerebral circulation disorder. Regardless of the cause of cerebral circulation disorder, the result is always the same - the death of brain neurons[2,4]. The most common cause is atherosclerosis on the inner walls of blood vessels that supply the brain. They narrow the blood vessels and make them less flexible. In this case, the probability of clogging the blood vessels with blood clots increases, as a result, the blood vessels cannot supply blood to the brain[5,9].

Keywords: cerebral circulation disorder, atherosclerosis, stroke, cerebral brain

Introduction: Stroke is the second most frequent cause of death in the world as of 2011 (coronary heart disease being more frequent [2,6]. Approximately 6.2 million people die from stroke per year (about 11% of all deaths). About 17 million people suffered a stroke in 2010. About 33 million people had a previous stroke and were still alive in 2010. Between 1990 and 2010 the number of strokes fell by about 10% in developed countries and increased by 10% in developing countries [1,3,8]. People in Asia have an increased risk of dying from stroke, accounting for about 40% of stroke deaths [6,7].

Purpose of the study: To study the demographic data of patients between hemorrhagic and ischemic stroke

Material and Methods: We investigated clinical and demographic aspects of 70 patients with stroke who were treated in the neurology department of clinic No.3 of Tashkent Medical Academy.

The study of acute stroke is based on 5-year follow-up from 2015 to 2020 at the clinical site of the Department of Nervous Diseases, Tashkent State Institute of Dentistry.

Inclusion criteria for the study group:

- Patients aged 40 and over
- Verified diagnosis in patients with 'haemorrhagic' and 'ischaemic stroke' according to the international classification;

- Patients with sequelae of ischaemic and haemorrhagic cerebral stroke;
- anamnestic, clinical, neuroimaging and neurophysiological signs of brain damage;
- written informed consent of patients to participate in the study.

Results: There were 41 males (67.8%) and 29 females (33.2%). As can be seen from the data presented, there was a significant predominance of males over females ($p < 0.001$), which again supports the view that males are more vulnerable. Age ranged from 40 years or older. The mean age at stroke in the main group of patients was 52 years or older (Me-median, Q1; Q3- interquartile range).

Depending on stroke type, patients were divided into hemorrhagic 18 (29.2%) and ischemic stroke 52 (71.8%).

The distribution of patients by periods of disease course in hemorrhagic and ischemic stroke was as follows: in early recovery (from 21 days to 6 months) - 27 (52%) and 4 (32%) cases; in late recovery (from 6 months to 2 years) - 14 (31%) and 7 (27%); in the residual effects period (more than 2 years from disease onset) - 11 (18%) and 9 (43%) cases in GI and II respectively (Table 1).

Table 1
Demographics of the patients surveyed

Age at stroke, (Me, Q1; Q3;), months.	38 years old /65 years and over
Gender (M/D)	41/29
Type and type of stroke:	
Haemorrhagic/ischaemic	18/ 52
Stroke periods:	II/GI
Early recovery	27/4 14/7 11/9
Late recovery	
Residual effects	29/3
Motor deficits:	16/6
Hemiparesis D	7/2

Among all patients studied, right hemiparesis was observed in 29 (32.8%) and 3 (30%) patients in the HI and II group, left hemiparesis in 16 (29%) and 6 (46%) patients, and tetraparesis in 2 (28%) patients with ischemic stroke and in 7 (15%) patients with ischemic stroke (Figure 1).

In the study, stroke patients were divided into 2 groups.

The first group consisted of patients with haemorrhagic stroke (HI) detected by MSCT. The study included 12 men and 6 women aged 35 to 85 years, mean age 62 years. The greatest number of patients (65%) belonged to the age groups of 50-59 and 60-69 years.

The second group consisted of 52 patients with ischemic stroke (IS). The study included 29 males and 12 females aged 35-85 years, mean age 62 years. The highest number of patients (65%) belonged to the age groups 50-59 and 60-69 years.

When the anamnesis was collected, special attention was paid to somatic and neurological status depending on the period of the disease. In addition, the data of the studied groups of patients were recorded in the standardized medical history prepared for stroke patients at the department of nervous diseases and physiotherapy of the Tashkent State Institute of Dentistry.

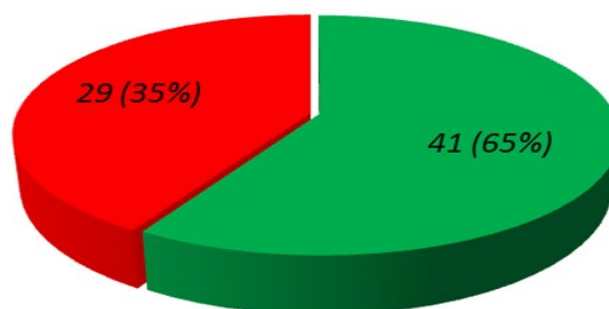


Fig.1 Distribution of patients by gender(female sex in red, male sex in green)

The χ^2 , phi and Cramer coefficients were calculated to determine the association between the development of different types of stroke as a function of age in the comparison of the aforementioned groups.

The χ^2 -Pearson value of 0.760 ($p < 0.001$) indicated statistically significant large differences between the groups, and the phi and Cramer coefficients of 112.240 ($p < 0.001$) indicated a statistically significant association between these criteria.

Conclusions: Thus, the clinical evaluation of cerebral stroke patients revealed that male ischemic cerebral stroke patients with a mean age of 50-59 years and 60-69 years and right-sided localised motor deficit predominate. In addition to the above, a detailed examination of patients after a cerebral stroke revealed that motor deficits such as paresis and paralysis of central genesis prevailed in the focal symptomatology.

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