

Stroke in Elderly Patients Admitted at Mayo Hospital, Lahore

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Early constitute a major proportion of our population. Our study at West Medical Unit of Mayo Hospital, Lahore was based on elderly patients presenting with various types of stroke. Out of 206 elderly patients, 28 had stroke. 12 were female and 16 male. 3 had transient ischemic attack (TIA), 16 suffered from thrombotic stroke and 9 from haemorrhagic event. 6 patients from study group died and 2 left against medical advice. We concluded that stroke is a disease of the elderly imposing major impact on their mortality rates, age being a major risk factor. Hence stress should be laid on the disease as well on the elderly which constitute a major portion of our population.

Key words: Elderly, stroke

Stroke is the third most common cause of death and one of several chronic diseases that account for the greatest burden of physical disability and health service utilization in later life.¹ Aging is the most important independent risk factor for stroke but is obviously not a modifiable factor. For each successive 10 years after age 55 years, the stroke rate more than doubles in both men and women.^{2,3} But it is generally observed that the hospital management is generally less active in this age gp⁴. More successful recognition and management of the disease can result in a better outcome for such patients in this age group. Our study at Mayo Hospital, Lahore was designed to analyze the demographics, modes of presentation and mortality of elderly patients presenting with stroke at a teaching hospital, and to assess how these factors modify with advancing age.

Material and method

The study was an observational analysis of 206 elderly patients admitted to West Medical Ward of Mayo Hospital, Lahore during the months of September and October, 2006. Mayo Hospital is a 1799 bedded, tertiary care teaching hospital, located in the heart of the city. There are 50-55 beds available at a time for adult patients in the West Medical Ward. The age criteria for patients recruited for the study was taken as 60 yrs. And above, i.e. our present retirement age.

Results

Out of 206 patients included in the study, 28 (13.6%) suffered from cerebrovascular disease. Patients fell in the age group of 60-100 years. They were further categorized into subgroups.

- A) 60-69 yrs.: 16 (57.1%) patients.
- B) 70-79 yrs.: 8(28.6%) patients.
- C) 80 & >: 4(14.3%) patients.

Out of these 28 patients with cerebrovascular disease, 12(42.8%) were females and 16 (57.2%) males.

The patients presented in three forms (Table I):

1. Transient ischemic attack (TIA): in 3(10.7%)
2. Thrombotic stroke in 16(57.1%)
3. Hemorrhagic stroke in 9(32.2%)

6 (21.4%) patients with stroke died during hospital stay, 2(7.1%) left against medical advice and the remaining 20(71.4%) were discharged from the hospital (Table II).

Table I: (n=28)

	TIA	Thrombotic	Haemorrhagic
60-69 Years			
Male	0	3	3
Female	2	6	2
70-79 Years			
Male	0	2	1
Female	1	2	2
80 Years & >			
Male	0	2	1
Female	0	1	0

Table II: (n=28)

Outcome	60-69 yrs	70-79 yrs	80 years & >
Death	3	1	2
Discharged	12	7	1
LAMA	1	0	1

Discussion

With substantial increase in life expectancy at birth, the proportion of elderly persons that constitute populations is on the rise worldwide⁵.

Cerebrovascular disease is reaching epidemic proportions worldwide. Studies have demonstrated the prevalence of stroke in the general population to increase from 0.9% in the non-geriatric group to 10% in the patients >70 yrs⁶. The high prevalence of the problem i.e. 13.6% observed in our study on the whole is consistent with these observations. However, patients in age group 60-69 years constituted 57.1%, those in group 70-79 years were 28.6%, while those 80 years and above were 14.3%. Thus a progressive increase in prevalence with advancing age is not seen in patients in our study. This observation may be attributed to the underreporting of symptoms, as many minor strokes and TIA's go unnoticed or neglected by the patients and family members. Also it was observed that the rate of admission of very elderly stroke patients was less in the hospital setting on the whole because they require continuous nursing care, in much part by the family members, the cooperation of whom was generally found

lacking. This further is also reflected in the fact that 2(7.1%) were taken away by the family members against medical advice.

The sex distribution of stroke in our study group was that 12 (42.8%) were females. In the age groups 60-69 years and 70-79 years, male rates exceeded female rates i.e. 62.5% and 37.5% respectively, whereas female rates tended to be greater i.e. 75% in the age group 80+ years. In both sexes, rates increased dramatically with age, consistent with known epidemiology of stroke. In the age groups 65-74 years and 75-84 years, male rates exceeded female rates, whereas female rates tended to be greater in the age group 85+ years. In both sexes, rates increased dramatically with age, consistent with the known epidemiology of stroke.⁷

The commonest subtype of stroke in our patients was thrombotic, which was observed in 57.1%; the prevalence of hemorrhagic stroke was seen to decrease with advancing age (Table I). This supports similar observation made in larger studies^{8,9}

Major proportion i.e. 50% of patients in the age group 80yrs and more died. This can be attributed to presence of co morbid conditions and poor general health of these patients. This is in contrast to studies carried out in developed countries which show a decreased mortality of stroke in very elderly group due to better risk factor management, including better control of hypertension⁷.

Conclusion

The proportion of stroke patients who are very old will rise in the future with increasing life expectancy and westernization of habits. Improving stroke outcome in this older age group will constitute a challenge for all

physicians. It is recommended that more stress is laid on preventing and managing diseases which threat high morbidity and mortality to the elder members of our community.

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