# **ABSTRACT**

#### **BACKGROUND**

Cerebrovascular disease is the most common cause of neurological morbidity and mortality in adults. Stroke is the second most common cause of worldwide mortality. Stroke is a rising epidemic in India due to the increasing prevalence of hypertension, diabetes, dyslipidemia, the fast changing lifestyles and restructuring of the population. This devastating and disabling cerebrovascular disease with some amount of residual deficit leads onto economic burden.

The etiology of stroke in majority of cases could be identified by a proper history taking, an adequate examination and judicious use of investigations including imaging of the brain. A hospital based descriptive study was done to identify the risk factors, clinico-radiological profile and the outcome of the patients presented with acute cerebrovascular disease.

#### **METHODOLOGY**

A descriptive analytical study was conducted between *April 2017 to September 2017* on 200 patients presented with acute cerebrovascular disease in Stanley medical college hospital, Chennai 01. The patients enrolled in the study were subjected to a detailed clinical history and physical examination. Clinical history was obtained from the relatives when the patient was having speech

disturbances, altered sensorium and loss of consciousness. The investigations like Complete blood count, Renal function test, Fasting and postprandial sugars, Fasting lipid profile, Urine routine examination, Electrocardiogram, 2D ECHO, Computed tomography(CT brain) were done. The outcome was studied at the time of discharge by patient's general condition, and was classified as Complete recovery (with no sequelae) ,Partial recovery(moderate sequelae) and Death. Data collected from 200 selected subjects was internally compared and statistically analysed by using descriptive and inferential statistics based on the formulated objectives of the study.

## **RESULTS**

Stroke was more common above the age of 61 years (74%); 61 to 80 years constituted 48%. Stroke in young was found only in 7% of patients. Mortality was more in males (6.5%) but there is no significant statistical difference between both gender and the outcome of Stroke. Motor weakness was the commonest presenting symptom (76%) in my study. Among risk factors, increased incidence of atrial fibrillation noted in complete recovery group compared to partial recoveryand death group. Analysis revealed statistically significant association between additive effect of smoking + consuming alcohol and outcome

in patients with acute cerebrovascular disease. Majority of the patients in this study (80.5%) had cerebral infarct and MCA territory involvement was more common (57%). Hemorrhagic stroke was observed in 19.5% of patients with Intraparenchymal bleed (16.5%) and subarachnoid hemorrhage (3%);.

### **CONCLUSION**

Patients diagnosed with hemiplegia have greater risk and incidence of death compared to hemiparesis (which favours recovery)

Patients presenting with clinical history of headache, vomiting, dizziness and gait disturbance have greater risk and incidence of death compared numbness, slurring of speech (which favours recovery)

Patients presenting with atrial fibrillation as comorbidity have a higher incidence of complete recovery {cardio-embolic stroke}

Patients presenting with additive effect of smoking+alcoholism have greater risk and incidence of death compared to either habits separately or no habits

Patients presenting with CT diagnosis as hemorrhage have greater risk and incidence of death compared to infarct

Patients presenting with posterior circulation involvement have greater risk and incidence of death compared to MCA/ACA vessel involvement