

ABSTRACT

BACKGROUND AND OBJECTIVES

Among all the neurological diseases of adult life , the cerebrovascular ones clearly rank first in frequency and importance. At least 50% of the neurological disorders in a government hospital are of this type. Stroke after heart disease and cancer is one of the most common causes of death.

C reactive protein is an acute phase reactant that is produced from the liver and it is increased in conditions of infection and inflammation. There are innumerable studies showing a correlation between C reactive protein and various vascular events. Atherosclerosis is a condition that causes chronic inflammation and hence a rise in C reactive protein. Ischaemic stroke is associated with atherosclerosis and tissue damage both of which causes a rise in C reactive protein. This test is readily available in most of the hospitals. Since studies show a positive correlation between C reactive protein and acute ischaemic stroke , finding the relationship between serum C reactive protein at presentation and clinical outcome , may be useful in planning appropriate intervention to reduce the risk and improve the outcome.

METHODS

100 patients admitted in the wards of department of Internal Medicine , Madras Medical College and Rajiv Gandhi Government General Hospital with

acute ischaemic stroke were taken for the study based on inclusion and exclusion criteria.

RESULTS

Majority of the patients admitted with acute ischaemic stroke were hypertensive , diabetic , smokers and had dyslipidemia. Majority of the patients who had severe stroke according to NIHSS score were hypertensive , diabetic, smokers and had dyslipidemia. More percent of males were found to have severe stroke compared to females probably because most of the males were smokers. Correlation of age and stroke showed that severe stroke occurred in older age group compared to younger patients. Patients with higher values of C reactive protein had severe stroke and had poorer outcome. All the patients who had poor prognosis had elevated C reactive protein.

INTERPRETATION AND CONCLUSION

Hypertension , diabetes mellitus , smoking and dyslipidemia are the most important risk factors associated with stroke. Elevated C reactive protein is associated with severe stroke and poor outcome.

KEYWORDS

Acute Ischaemic Stroke, C Reactive Protein, National Institute of Health Stroke Scale, Modified Rankin Score, Barthel Index