

# A CLINICAL STUDY ON ETIOPATHOGENSIS OF STROKE IN YOUNG

## **KEYWORDS**

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|---|---|
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ABSTRACT Stroke is a leading cause of morbidity, occurs predominantly in middle and late years of life. Though the incidence of stroke increases with age, this study focuses on etiological, pathological presentation of stroke in young. This study evaluates risk factors and different modes of clinical presentation of stroke in young adults.

### AIM OF THE STUDY

- $1. \, To\, evaluate\, the\, risk\, factors\, of\, Stroke\, in\, young\, adults.$
- 2. To study the different mode of clinical presentation or types of Stroke in young adults.

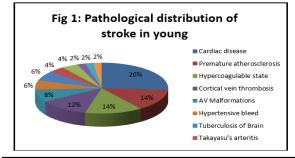
#### Materials and Methods:

This study was conducted in ASRAM medical college hospital, includes fifty patients of stroke in patients below 40 years of age, admitted in Medical, Neurology wards. A detailed clinical history for risk factors like smoking, alcohol, Rheumatic heart disease, pulmonary tuberculosis, family history of cerebrovascular disease and clinical examination had been done with relevant investigations. Patients of stroke above 40 years age are excluded in the study.

#### **Results:**

| Table:1 Age wise distribution of stroke in Young |             |                  |  |  |
|--|-------------|------------------|--|--|
| Age (in years)                                   | No of cases | Cases Percentage |  |  |
| 20 and below                                     | 9           | 18%              |  |  |
| 21 - 25  | 6           | 12%              |  |  |
| 26 - 30  | 9           | 18%              |  |  |
| 31 - 35  | 10          | 20%              |  |  |
| 36 - 40  | 16          | 32%              |  |  |

| Table:2 Etiopathology wise distribution of stroke in young |                 |            |  |  |
|--|-----------------|------------|--|--|
| Etiopathology  | Number of cases | Percentage |  |  |
| Cardiac disease  | 13              | 26%        |  |  |
| Premature atherosclerosis                                  | 7               | 14%        |  |  |
| Hypercoagulable state                                      | 7               | 14%        |  |  |
| Cortical vein thrombosis                                   | 6               | 12%        |  |  |
| AV Malformations   | 4               | 8%         |  |  |
| Hypertensive bleed   | 3               | 6%         |  |  |
| Tuberculosis of Brain                                      | 3               | 6%         |  |  |
| Takayasu's arteriosclerosis                                | 2               | 4%         |  |  |
| Idiopathic   | 2               | 4%         |  |  |
| Brain abscess  | 1               | 2%         |  |  |
| Carotico embolic   | 1               | 2%         |  |  |
| Trauma   | 1               | 2%         |  |  |



| Table:3 Clinical Presentation of stroke |              |            |  |  |
|---|--------------|------------|--|--|
| Type of Lesion                          | No: of cases | Percentage |  |  |
| Infarction                              | 33           | 66%        |  |  |
| Hemorrhage                              | 13           | 26%        |  |  |
| Others                                  | 4            | 8%         |  |  |

#### Discussion:

In this study, the peak incidence of stroke was observed in the age group of 36-40 years which was 32%. It was 20% in the age group of 31-35 years. In a study conducted by P.M.Dalal et al80, the incidence of stroke was maximum in the age group of 36-40 years which is similar to our study.

In our study 52% of patients were above the age of 30 years, compared are 48% patients in the above study. Most of the patients (26%) who developed stroke are cardiac patients. Premature atherosclerosis is the risk factor for 14% of stroke patients. Patients are having recurrent stroke.

## CONCLUSION

- 1. The incidence of stroke in young adults is more common in the age group between 36-40 years & males are more affected (64%) than females (36%).
- 2. Cardio embolic stroke is the commonest cause of stroke in young adults. Smoking is the most significant risk factor for stroke in young adults mainly due to the premature atherosclerosis associated with it
- 3. All the patients who suffered from cortical vein thrombosis are females in puerperal period.
- $4. \ Among \ hypercoagulopathies \ causing \ stroke, hyperhomocysteinemia is the common est followed by Antithrombin III deficiency.$
- 5.The predominant mode of presentation of stroke is middle cerebral territory involvement. The commonest pathological type is (ischaemic stroke (66%)).
- 6. In vascular disease, takayasu's arteritis causes 4% of stroke & arteriovenous malformation causes 8% of stroke.

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