



**ORIGINAL RESEARCH PAPER**

**General Medicine**

**CLINICAL PROFILE OF INTRACRANIAL BLEED PATIENTS UNDER 50 YEARS IN A TERTIARY CARE CENTER**

**KEY WORDS:** Hemorrhagic stroke, intracranial bleed.

**Dr Nikhil Agarwal\***

Junior Resident, General Medicine. \*Corresponding Author

**Dr Kalikiri Nithish Reddy**

Junior Resident, General Medicine.

**Dr. N. D. Moulick**

Professor, General Medicine.

**Dr. Smita Patil**

Professor, General Medicine.

**ABSTRACT**

**Introduction:** Intracranial hemorrhage results from bleeding in or around the brain, often caused by hypertension, coagulopathy, drug use, or cerebral amyloid angiopathy. **Objective:** To examine the clinical profile of intracranial bleed patients under 50 years in a tertiary care center. **Methodology:** Conducted over 3 months at DY Patil Hospital, patients with radiologically diagnosed intracranial bleed were included, and a detailed history and examination taken. **Observation:** Of 25 admissions, 9 patients were aged 16-50, including 5 with known hypertension, 2 newly diagnosed, 1 with coagulation issues, 1 pregnant with eclampsia risk, and 1 thalassemia major case. **Discussion:** Intracranial bleeds in young patients often involve vascular malformations, with low acute phase mortality/morbidity, primarily linked to hypertension. **Result:** 36% of intracranial bleed cases were aged 16-50, with 5 males and 4 females; 7 had elevated blood pressure on presentation. 3 had altered coagulation profile at presentation. 3 out of 9 patients were mortalities.

**INTRODUCTION**

A stroke or cerebrovascular accident is defined as an abrupt onset of a neurologic deficit that is attributable to a focal vascular cause. Stroke is differentiated into ischemic stroke and haemorrhagic stroke. Intracranial haemorrhage is caused by bleeding directly into or around the brain. The common risk factors associated with ICH are: hypertension; sympathomimetic drugs and cerebral amyloid angiopathy. Other risk factors include advanced age, heavy alcohol, low dose antiplatelet therapy use without cardiovascular disease. ICH presents usually as focal neurological deficit, abrupt in onset with symptoms maximal at onset, associated with drop in consciousness and increase in intracranial pressure. There is a low prevalence of the usual risk factors in the younger age groups; the most common risk factors included hypocholesterolaemia and hypertension. Cocaine and methamphetamine are common causes of stroke in young patients. ICH in young patients are associated with lobar strokes causing focal headaches and drop in consciousness

**MATERIALS AND METHODS**

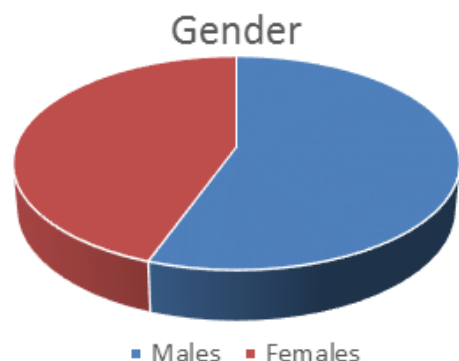
The present study is an observational cross sectional study conducted at DY Patil School of Medicine, Nerul, Navi Mumbai conducted over a period of 3 months between December 2023 and February 2024. Patients between the age of 16-50, diagnosed with intracranial bleed on neuroimaging were included in the study. All cases with history of trauma preceding the onset and patients diagnosed with sub-arachnoid hemorrhage were excluded from the study. For all patients, a detailed clinical history was obtained and clinical examination was performed. Routine investigations were done.

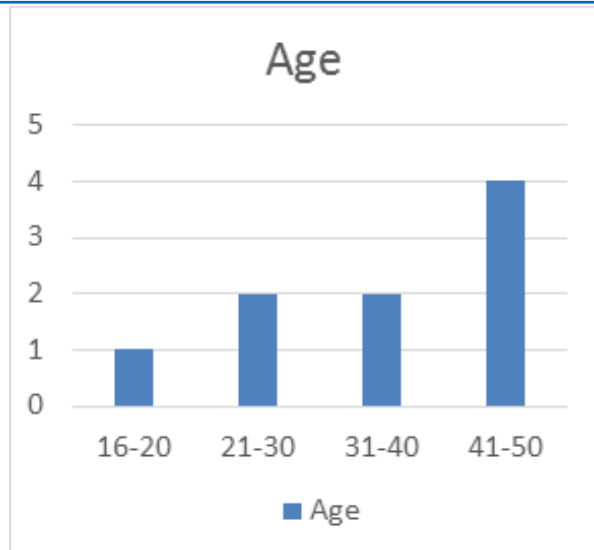
**Observations**

Out of the 9 patients, there were 5 males and 4 females. Among them, 1 patient was in the age group of 16-20 years, 2 were in the group of 21-30 years, 2 in the group of 31-40 years and 4 in the group of 41-50 years. 3 patients, presented with altered mental sensorium i.e. with loss of consciousness, decreased responsiveness etc. 2 patients presented with right sided hemiparesis and with 2 with left sided hemiparesis. 1 patient had complaints of tingling and numbness over the limbs. 1 patient had complaints of giddiness associated with headache and vomiting. 7 patients had elevated blood pressure on presentation.

- Within the time frame of the study, 25 patients presented to the DY Patil hospital which were diagnosed with Intracranial Bleed.
- Within the 25 cases, 9 patients were within the age group of 16-50 years and were included in the study.
- The male:female ratio was 5:4.
- 4 out of 9 patients were within the age group of 41-50 years.
- 7 patients presented with raised blood pressure out of which 4 patients were taking treatment for hypertension.
- 5 patients had end organ damage in the form of left ventricular hypertrophy noted on 2d Echocardiogram.
- 4 out of 9 patients presented with hemiparesis/hemiplegia.
- 3 patients presented with altered mental status with later died during hospital stay.
- 3 cases amongst the study group had altered coagulation profiles predisposing to intracranial bleeds. Among them, 1 patient was a female, with history of multiple spontaneous abortions and intra-uterine foetal deaths. She was a known case of hypertension on treatment. 1 patient was a case of chronic kidney disease, on maintenance haemodialysis. The patient diagnosed with infective endocarditis with dilated cardiomyopathy during current hospital stay. The patient developed cardioembolic stroke with hemorrhagic conversion and intraventricular extension.
- Amongst them, 1 subject was 28 weeks antenatal, recently diagnosed with pregnancy induced hypertension with pre-eclampsia. The patient also had history of eclampsia in her previous pregnancy.

**DISCUSSION**





**CONCLUSION**

Out of 25 patients of IC bleed, 9 were less than 50 years of age. Majority of the cases presented with raised blood pressure, suggesting the aetiology being uncontrolled hypertension. All patients that presented with poor consciousness or altered mental status have a poor prognosis. Patients presenting with weakness of limbs usually recover power gradually, although focal deficits are usually persisted. Pregnancy and puerperium can be related to several types of strokes including IC bleeds. However, these results can't be interpolated to the general population considering the small sample size of this study.

**REFERENCES**

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