

## **Intracranial Stenosis in Nepalese Stroke: An observational study in Neurological center** (Annapurna Neurological Institute, Kathmandu)

**Background:** Stenosis of blood vessel(s) has been of the major cause of ischemic events. Extracranial stenosis and/or intracranial stenosis are a major attributing factor for the stroke. Intracranial stenosis has been shown to be an uncommon cause of the stroke in the western population occurring only in as many as 8% of patients with Transient Ischemic Attack (TIA) or Stroke. Northern Manhattan Study showed that only 1% of white population among stroke patient had intracranial stenosis, while other consecutive studies backed by the angiographic studies showed that the incidence of intracranial stenosis in Asian and Black population was pretty high. We tried to compare the incidence of intracranial vs. extracranial stenosis in Nepalese population, which has mixed ethnicity. We did the angiographic study and have noted the stenosis of extracranial, intracranial stenosis and the presence of collaterals. Majority of them underwent CT angiography. We have carried an observational study on the patients reaching our hospital with ischemic stroke regardless of duration.

**Methods:** Cases from the past three months were taken. From among 30 cases, majority of the cases had undergone CT angiography among other angiographic studies.

**Results:** Among the total cases of 30, only 13.3% of cases had extra cranial stenosis while 86.7% had intracranial stenosis. Among intracranial stenosis, majority about 30%, had multiple intracranial stenosis (middle cerebral artery and posterior cerebral artery territory).

**Conclusion:** Multiple Intracranial Stenosis is quite prevalent in Nepalese population as compared to the extra cranial stenosis. Stenosis and slow flow of blood resulting from the stenosis can be the cause of collateral circulation in the brain, which also needs to be studied in greater part. A larger study with multicenter data would be needed to have further conclusive research.

**Keywords:** Stenosis, Intracranial, Extracranial, Collaterals