

## **RESULTS OF TRANSCRANIAL DOPPLER STUDIES POST STROKE THROMBECTOMY**

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Introduction: Transcranial doppler (TCD) is a non invasive tool for assessing arteries of the base of the brain. TCD can be done at the bedside. Now thrombectomy has become the standard of care for acute ischemic stroke along with IV thrombolysis.

Methods: 50 acute ischemic stroke patients were studied between 1 and 6 hours post thrombectomy with bedside TCD. Mean flow velocities, pulsatility index (PI) and presence or absence of microemboli signals (MES) were documented for all patients. Patients were categorised as 1. Rapidly improves with NIHSS near zero, 2. Minimal improvement, 3. No improvement, 4. Cerebral circulatory arrest.

Results: 36% of patients showed rapid improvement. All the patients showed normal TCD findings post thrombectomy with MES detected in 12% of the patients. 20% showed minimal early improvement. 20% showed no improvement post thrombectomy. 2 patients showed restenosis. One patient proceeded to cerebral circulatory arrest with reverberating waveforms. Conclusions: TCD is an excellent easy bedside tool for monitoring the cerebral hemodynamics following stroke thrombectomy. There is no radiation involved in TCD. Rapidly improving patients have normal mean flow velocity and TCD wave morphology. TCD also tells us about reocclusion. Continuously knowing about the status of the vessel helps in further decision making. Presence of MES indicates the necessity for intensive follow up medical management.