

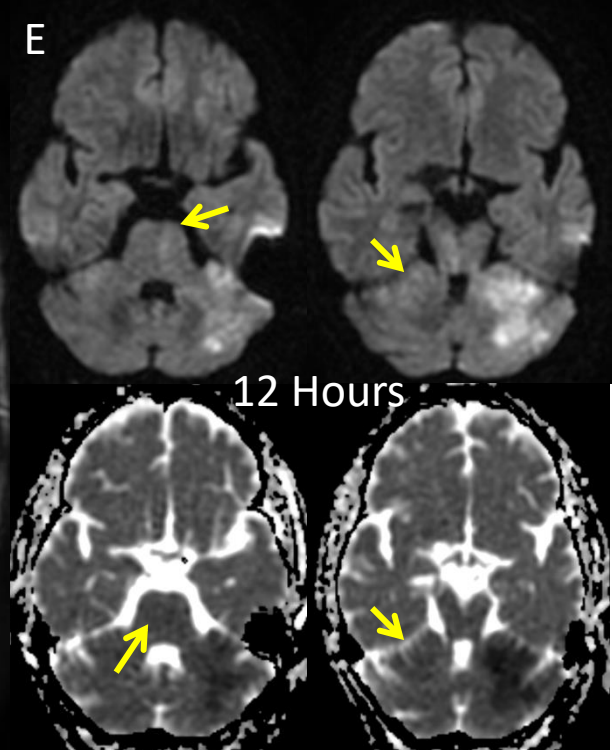
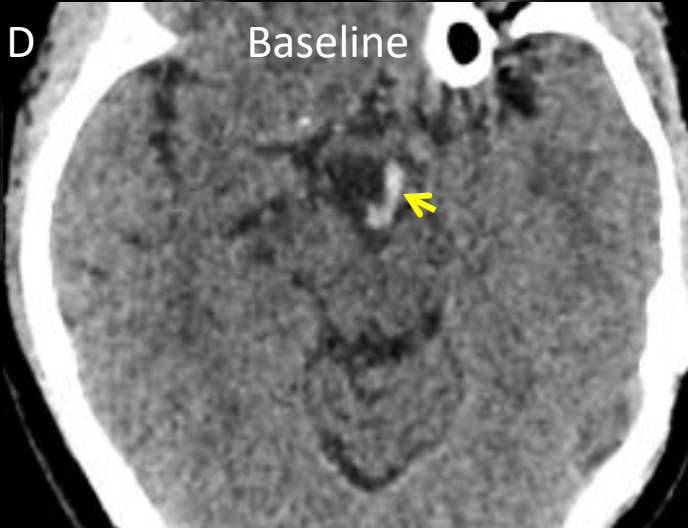
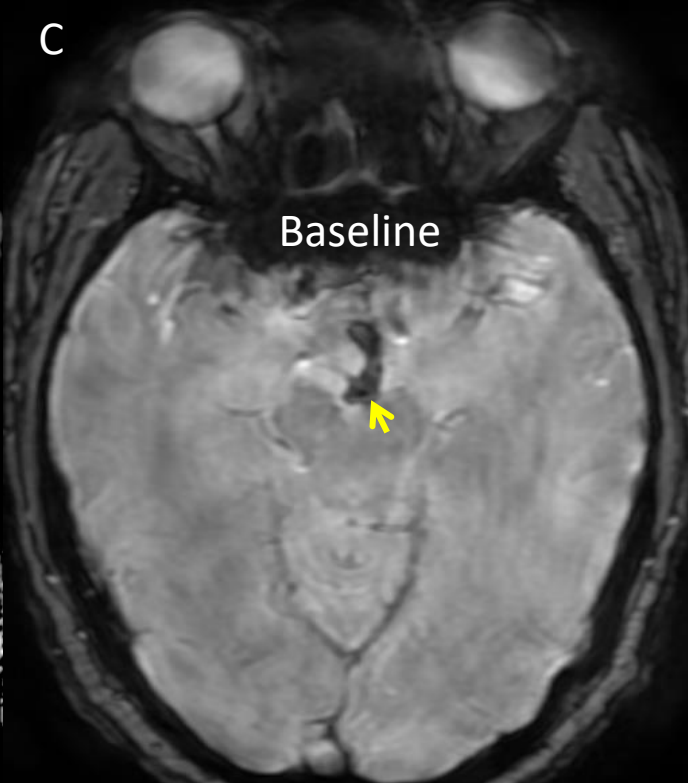
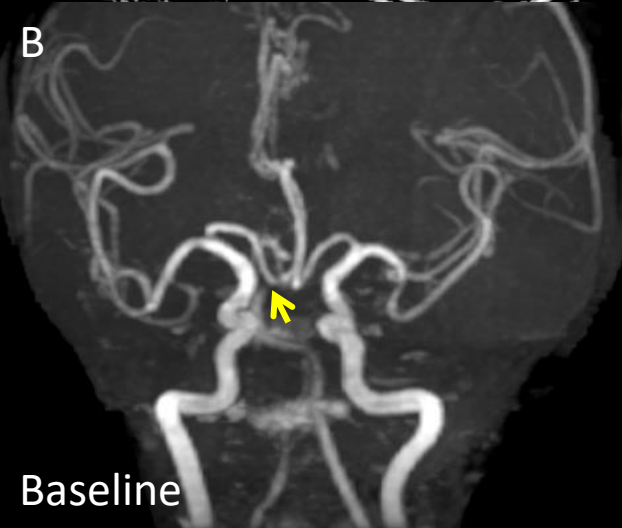
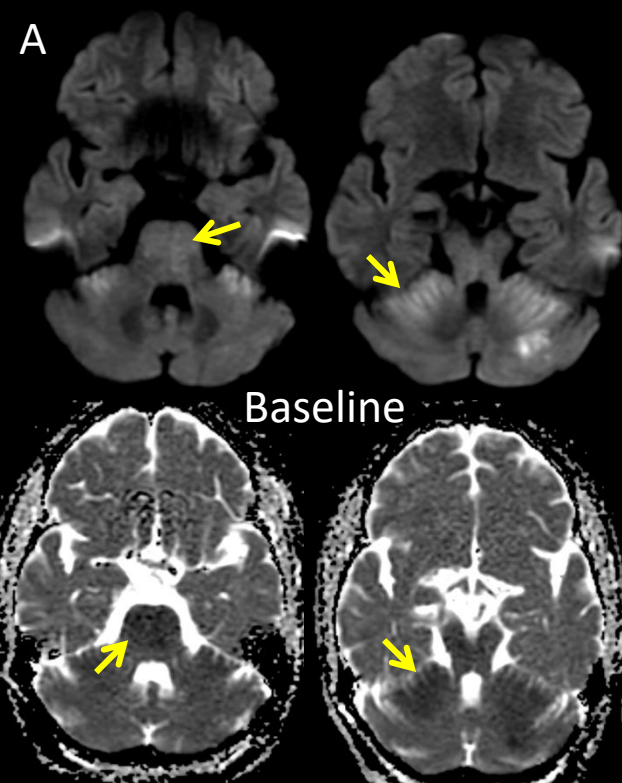
Neurointervention in acute ischemic stroke

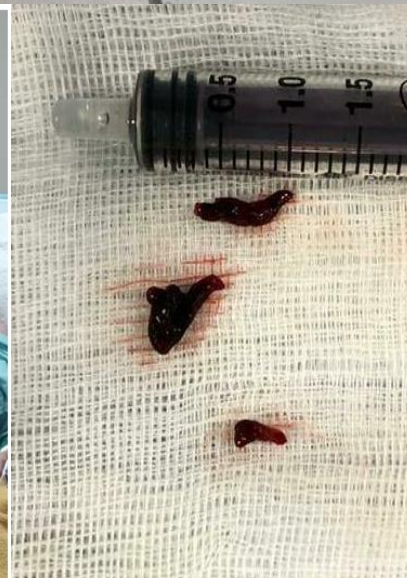
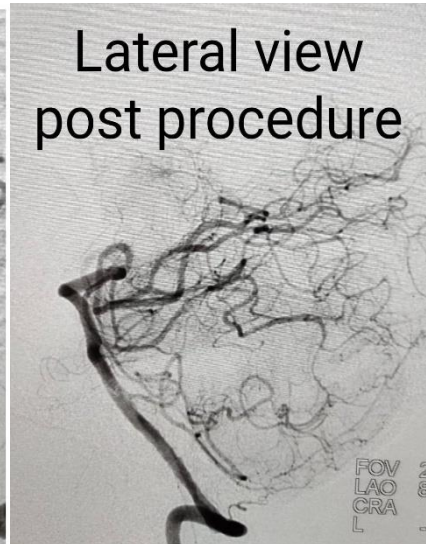
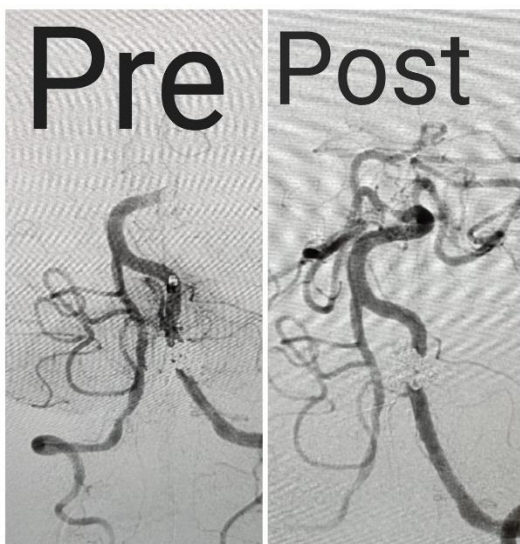
- Dr. Sharath Kumar G G
- Dr. Prakash P
- Dr. Lakshmikanth G N
- Dr. Chaitra P Adiga

Acute ischemic stroke with Diffusion reversal following Mechanical thrombectomy

60 year old lady with sudden onset right sided hemiplegia, altered sensorium and vomiting since 60 minutes

At presentation, BP was 220/120 mm Hg
She was intubated after controlling BP with injection Labetalol





Aspiration of the clot was done using large bore 068" dedicated aspiration catheter. Puncture to recanalisation was 15 minutes. Immediate Check CT head showed no bleed. 24 hours post procedure patient was extubated and she was awake, obeying and moving all four limbs with minimal residual ataxia. Patient rapidly improved in next 3 days and was independent at the time of discharge and on follow up. She was put on medical management for her hypertension and was on dual antiplatelets.

Ischemic Diffusion Lesion Reversal After Endovascular Treatment

- DWI reversal was defined as a decrease in DWI volume from baseline to follow-up.
- In a study by Yoo et al Of 720 patients, 404 patients (56.1%) met the study criteria for DWI reversal, with 63 patients (15.5%) showing DWI reversal after EVT. The mean time interval between baseline and follow-up DWI was 4.7 ± 2.4 days (1).
- The diffusion-weighted imaging (DWI) sequence in brain magnetic resonance imaging (MRI) serves as a surrogate marker of acute ischemic stroke, which highlights evidence of core brain infarction (2).
- Partial or complete DWI reversal has also been reported in several clinical studies following intravenous thrombolysis (3).
- Recently, endovascular treatment (EVT) has extended the therapeutic time window for patients with acute ischemic stroke (≤ 16 –24 hours from symptom onset in select patients) and has shown greater efficacy than IVT only. Indeed, EVT can mitigate the expansion of DWI and possibly lead to DWI reversal (4).

References

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