

## DECISION MAKING CHALLENGES IN ACUTE STROKE

Sir,

A 72 years old gentleman with no significant past medical history presented to our hospital with acute onset Right Ischemic arm, a CT with contrast of arm showed right brachial clot. Heparin 5000iu bolus was given, infusion was commenced and arrangements for transfer to specialized vascular team was made, during transfer patient developed left-sided weakness and slurring of speech. As per protocol patient was returned back to nearest hospital. An urgent CT Brain was done (D-CTB 5min) as per guidelines for FAST positive or stroke patients (fig-1). Baseline investigations showed creatinine of 124. We had the Clinical Challenges like, can we repeat CT Angiogram considering elevated creatinine levels and the risks of thrombolysis following IV Heparin as the patient was within the thrombolytic window (4.5 hrs).

In relation to CT Angiogram and creatinine levels for patients who otherwise meet criteria for EVT (Endovascular Treatment), it is reasonable to proceed with CT Angiogram if indicated in patients with suspected intracranial LVO (Large Vessel Occlusion) before obtaining a serum creatinine levels in patients without a history of renal impairment<sup>1</sup>. In relation to heparin and thrombolysis, IV alteplase should not be administered to patients who have received a treatment dose of LMWH within 24 hours<sup>2</sup>.

We prioritized the treatment of stroke, so thrombolytic therapy was initiated within thrombolytic window (D-N 48 minutes), as CT Angiogram showed total occlusion of M1 of Right MCA (fig-2). So patient was transferred to specialized vascular unit for thrombectomy, CT Brain with perfusion (fig-3) showed ASPECT

score of 6, and thrombectomy was not done. The patient was transferred to Stroke Rehabilitation unit for further management.

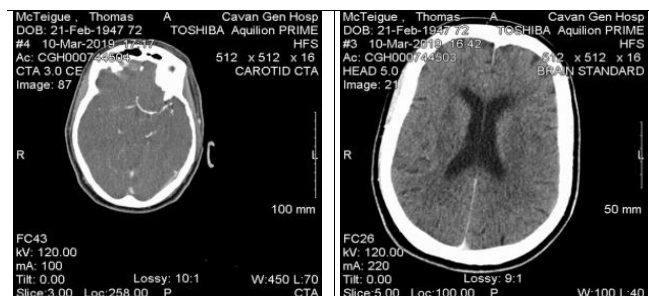


Figure-1: Normal CT brain.

Figure-2: Total occlusion of M1 segment of Right MCA, CT Angiogram.

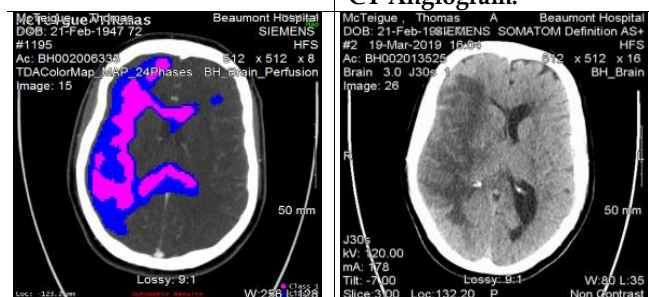


Figure-3: Aspect score of 6 not for thrombectomy.

Figure-4: MCA infarct.

## REFERENCES

1. Powers WJ, Rabinstein AA, Ackerson T, Adeoye OM, Bambakidis NC, Becker K, et al. On behalf of the American Heart Association Stroke Council. 2018 Guidelines for the early management of patients with acute ischemic stroke: a guideline for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke* 2018; 49(3): e46-110.
2. Powers WJ, Rabinstein AA, Ackerson T, Adeoye OM, Bambakidis NC, Becker K, et al. Guidelines for the early management of patients with acute ischemic stroke: 2019 update to the 2018 guidelines for the early management of acute ischemic stroke: a guideline for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke* 2019; 50(12): e344-e418.

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