EVOLVING ISCHEMIC STROKE SECONDARY TO ICA DISSECTION: FROM MEDICAL TO ENDOVASCULAR THERAPY

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HISTORY AND PHYSICAL

50years old patient presented to the hospital with history of mild headache and two episodes of loss of vision with complete recovery. On examination, there was no neurological deficit
Imaging: Cranial MRI, showed no ischemia/infarct on diffusion-weighted imaging. However on MR angiography there was narrowing of distal left internal carotid artery. On base images a small false lumen was seen suggestive of ICA dissection.

INDICATION FOR INTERVENTION

Since patient was asymptomatic at that time, he was put on heparin and antiplatelet and admitted to intensive care unit. After two hours he developed acute onset right hemiparesis and aphasia. Following which endovascular treatment was deemed necessary.

INTERVENTION

The ICA went into complete occlusion while the results of angiogram were being evaluated. Immediately the patient was taken up for parent artery reconstruction. Three stents (two intracranial and one carotid) were deployed telescopically to reconstruct ICA from the petrous segment till the mid cervical segment from distal to proximal fashion. Post procedure the Carotid artery opened up with smooth flow and disappearance of the flap. Follow-up MR angiogram of the patient revealed persistent patent left ICA with no clinical squeal.

LEARNING POINTS OF THE PROCEDURE

Acute ICA dissection is generally managed conservatively on medical therapy,
A close monitoring and if required as urgent endovascular treatment can prevent significant morbidity and mortality if the dissection progresses.

Figure 1: left ICA showing ICA occlusion with patent distal circulation.

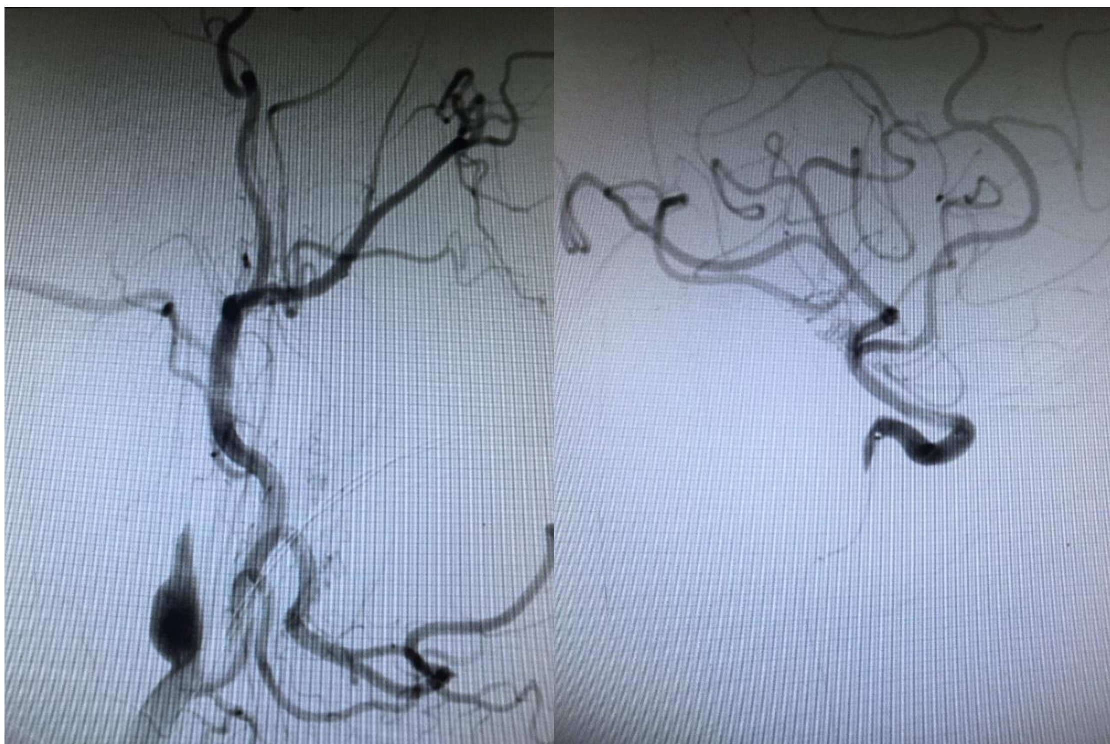

Figure 2: Post procedure -patent left ICA with three stents in situ.