

A Clinically Efficacious Case of Eptifibatide Administration In Achieving Vascular Recanalization

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Introduction: The application of Glycoprotein IIb/IIIa inhibitors (G2b/3aI) has been documented for treating thrombotic diseases. However, no study has documented the efficacy of intravenous eptifibatide in stroke patients that are out of time window for thrombolytic therapy. We report a case of IV eptifibatide administration in a patient who presented with an 18 hour history of left hemiparesis and facial droop.

Case: 51 year old female presented with an 18 hour history of left facial droop, left upper extremity hemiplegia and lower extremity hemiparesis (NIHSS 7). CT head showed right basal ganglia hypodensity. CT angiogram showed near occlusive clot at distal right Middle Cerebral Artery (MCA) (Figure 1). Patient was out of time window for intravenous rt-PA or intra-arterial intervention. IV eptifibatide bolus followed by continuous drip was administered for 20 hours with improvement of NIHSS from 7 to 1 (left upper extremity drift). MRA at 72 hours revealed subtotal recanalization of Right MCA (Figure 2).

Discussion: Administration of Abciximab for Treatment of Patients with Acute Ischemic Stroke (AbESTT)-II trial demonstrated increased rates of intracranial hemorrhage (ICH). The combined approach for achieving thrombolysis utilizing eptifibatide and recombinant tissue-type plasminogen activator (rt-PA) (CLEAR) stroke trial assessed the safety of treating acute ischemic stroke patients within 3 hours of symptom onset. Through this case we successfully demonstrated the efficacy and safety of administering G2b/3aI in a patient who presented with fluctuating neurological symptoms lasting more than 3 hours.

Conclusion: It is observed that a controlled dose of IV Eptifibatide with neurological monitoring led to sub-total recanalization of the MCA without ICH objectified by symptomatic improvement. Therefore, patients presenting to the hospital who are out of time window for IV rt-PA or intra-arterial intervention may benefit from intravenous platelet inhibitors such as eptifibatide, as seen in our patient. Further studies are warranted to validate our findings.

References:

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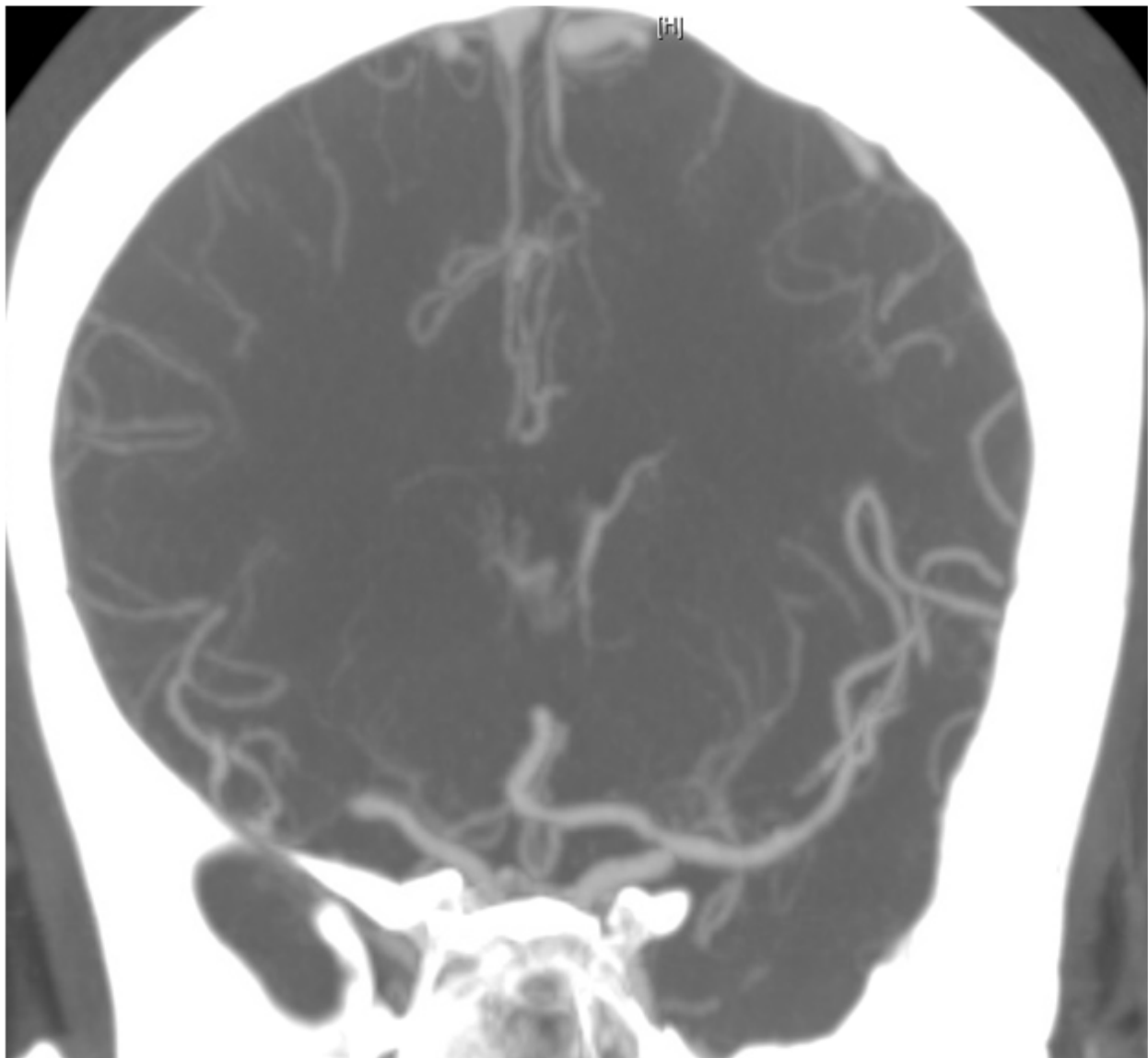


Figure 1- Distal right MCA occlusion on CTA



Figure 2-Subtotal recanalization of right MCA on MRA