Only Sudden Weakness in a 68-Year-Old Woman? A Cautionary Tale for Stroke Mimic

Tissue plasminogen activator (tPA) is the standard of care for acute ischemic stroke and typically results in functional improvement when administered within three hours of stroke onset. The use of tPA in stroke mimics can have detrimental effects including cardiac tamponade, intracranial bleeding and hemorrhage. There are limited reports of the use of tPA involving embolic stroke in the setting of intramural hematomas. We report a patient who was given tPA for symptoms of suspected acute cerebral ischemic stroke which subsequently demonstrated to be a Type A intramural hematoma with embolic stroke on thoracic computed tomography (CT) angiography. TPA was subsequently discontinued and the patient recovered neurologically with successful delayed aortic repair. In this case, the partial dose of tPA was sufficient to resolve the embolic stroke secondary to aortic rupture, while not exceeding the threshold for further bleeding. Our case demonstrates the significance of maintaining clinical suspicion for all etiologies of neurological deficits to prevent a missed diagnosis of masked emergencies such as aortic dissection, and that thrombolytics should always be used with caution with a thorough work up, particularly in patients with aortic disease.

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