

## **Under Pressure: A case series of unusual stroke mimics**

F. F. Graça<sup>1</sup>, T. S. Prado<sup>1</sup>, L. G. Matias<sup>1</sup>, W. M. Avelar<sup>1</sup>, P. C. Azevedo<sup>1</sup> Neurology Dept., FCM, UNICAMP

**Introduction:** Stroke Mimics (SM) are nonvascular conditions with neurological symptoms that resemble stroke[1]. Since intravenous thrombolysis (IVT) was established as the standard therapy for acute ischemic stroke (AIS), an effort to reduce the door-to-needle time increasing the success in earlier administration was made. However, the short time range turns decision making into a challenging situation[2]

**Materials and Methods:** We present a case-series of four patients from the University of Campinas Hospital that went under IVT and were further diagnosed as unusual causes of SM.

**Results:** Case 1: Female, 73yo, 3 hours of confusion, slurred speech and tetraparesis. Whereas the hypothesis of brainstem stroke, IVT was performed. Family, not present at the admission, related that the patient had five years of non-investigated ataxia. MRI and clinical evaluation confirmed the diagnosis of MSA-C. Acute confusion was attributed to delirium due to pneumonia.

Case 2: Female, 70 yo, 2 hours of acute onset of right hemiplegia. The patient was under treatment for otitis media since five days ago. IVT was initiated and needed to be interrupted due to difficult glycemic control. The patient developed fever and neck stiffness, CSF analysis confirmed the diagnosis of pneumococcal meningitis.

Case 3: Male, 61 yo, 1,5 hour of acute onset of right hemiparesis and dysarthria. Noncontrast CT scan was normal. IVT was performed but interrupted once patient decreased consciousness level. Further neuroimaging evidenced an extensive SAH (figure 1). After an appropriate investigation, endocarditis diagnosis complicated with a mycotic aneurysm was done.

Case 4: Male, 71 yo, 2 hours of left hemiparesis, no trauma or prior bleeding history. IVT was performed with slight improvement of symptoms. Posterior CT Angiography to cervical vessel and MRI (figure 2) demonstrated a cervical epidural hematom.





Figure 1 Figure 2

**Discussion and Conclusion:** In a nutshell, commom SM found in clinical practice are conversion disorder, seizures and migraine, nevertheless many others, including acute exacerbation of chronic diseases or life threatening conditions, need to be investigated in cases with atypical evolution.

**References:** [1] Vilela P Eur J Radiol. 96:133-144, 2017; [2] Tsivgoulis G et al., Stroke 46(5):1281-7, 2015.