

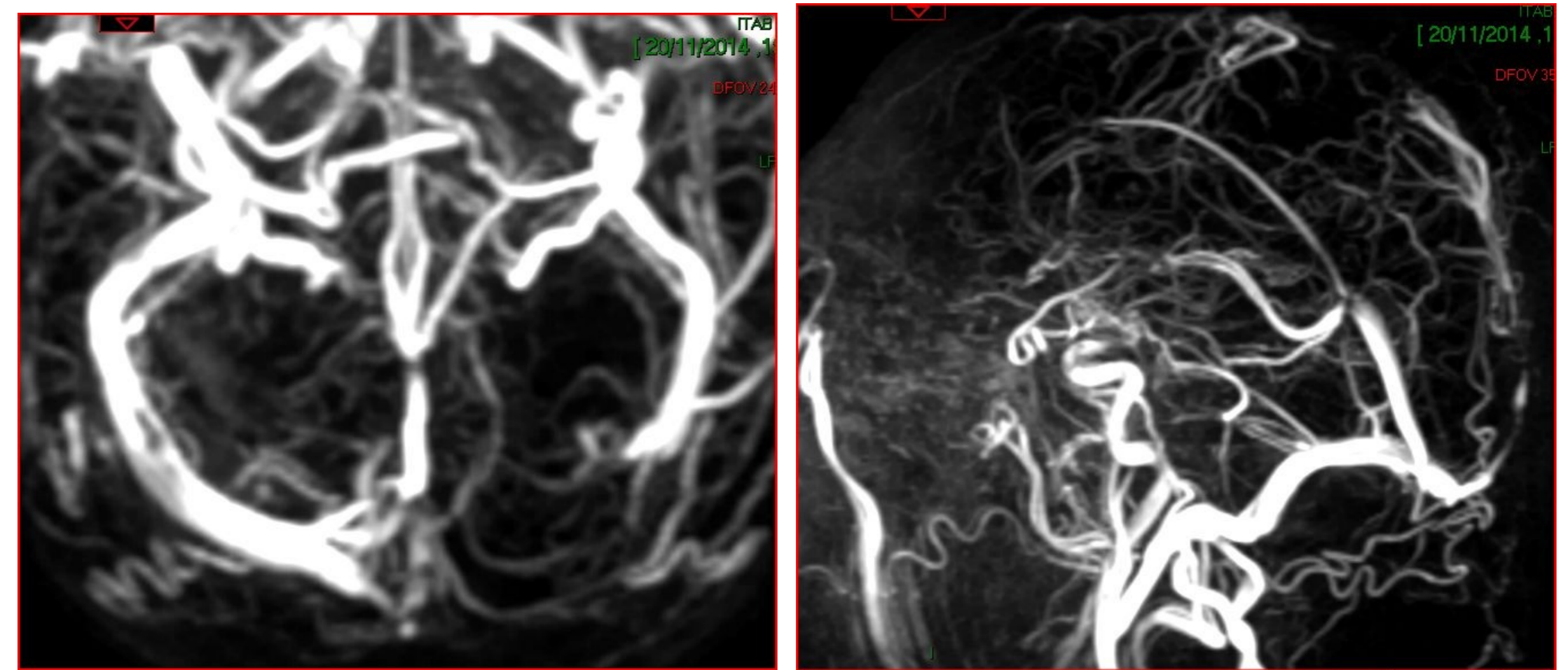
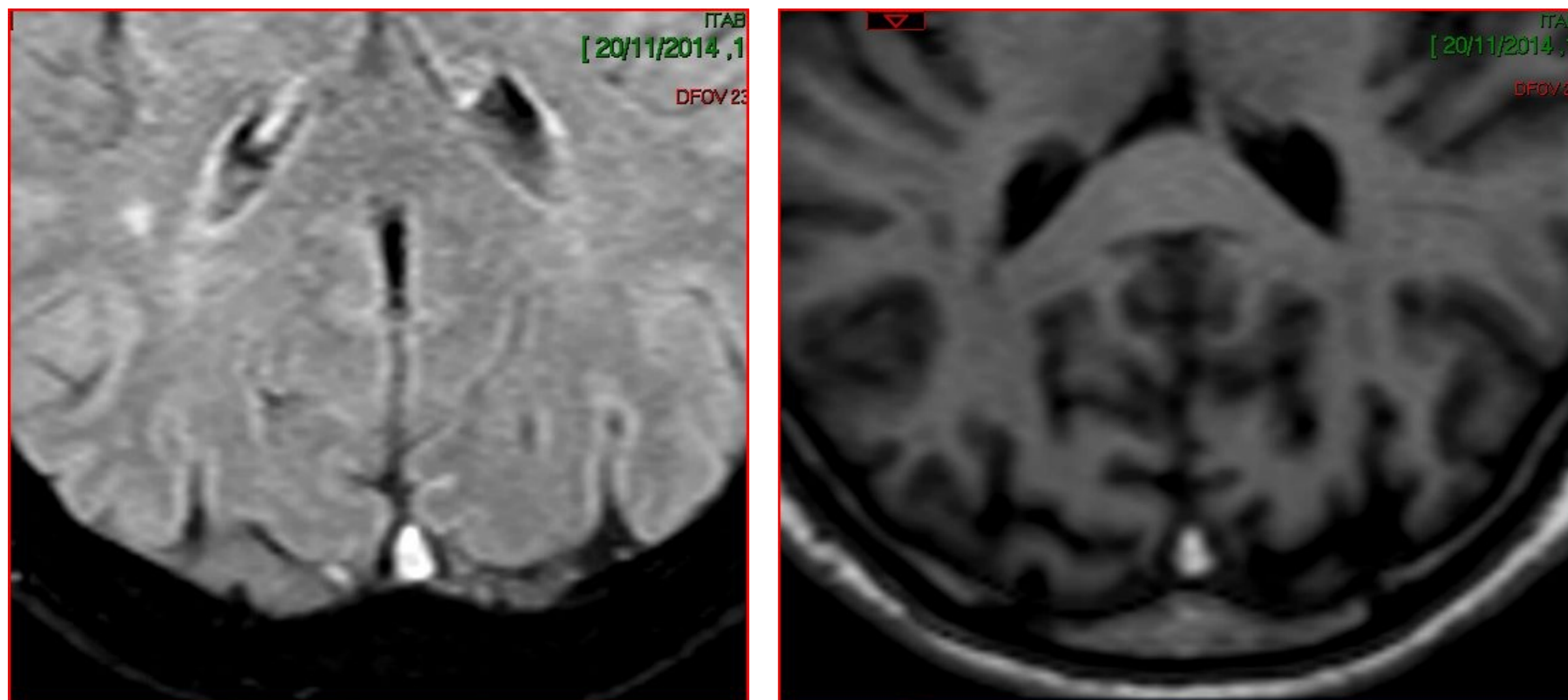
A PATIENT WITH RECURRENT STEREOTYPED EPISODES OF FOCAL NEUROLOGICAL DEFICIT

L. Mancinelli¹, M. Capasso², G. De Luca², R. Di Giacomo¹, A. D'Amico¹, V. Frazzini¹, H. Zhuzhuni¹, I. Borrelli¹, M. Onofri¹

1. Department of Neuroscience Imaging and Clinical Science, University "G. d'Annunzio" (Chieti)

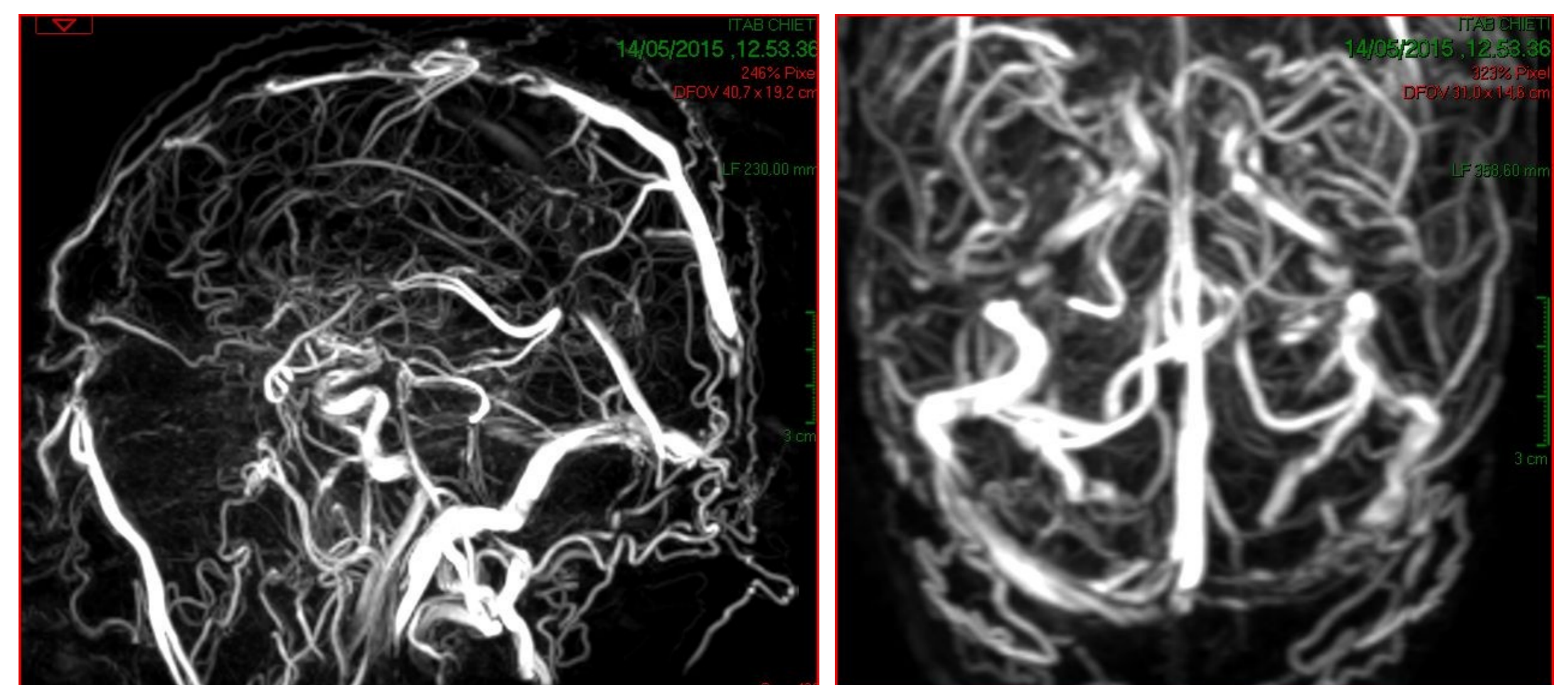
2. Neurology Clinic, Hospital "SS Annunziata" (Chieti)

Case Report: A 66 year-old man was seen at night in the emergency department because of recurrent episodes of left upper limb numbness and weakness, lasting 10 to 30 minutes and started three hours before. Neurological examination was normal between attacks. Medical history included arterial hypertension and lower limb post-traumatic thrombophlebitis. Sixteen days before, the patient reported a thunderclap headache accompanied by sweating and nausea which subsided within 48 hours.



Head CT scan performed thirteen days after the onset of headache was normal. A subarachnoid bleeding with consequent cerebral artery vasospasm or critical stenosis of cerebro-afferent or main intracranial vessels was suspected, but angio-CT scan and cerebrospinal fluid examination showed no pathological findings. The patient was then admitted to our clinic with a suspect of capsular warning syndrome and treated with aspirin 300 mg i.v. He experienced some further brief episodes of left upper limb numbness and weakness. EEG was normal.

In the morning, we could perform a head MRI, that showed superior sagittal and left transverse sinuses thrombosis, with signs of recent ischemia of the right precentral cortex. We started low molecular weight heparin, followed by warfarin. Laboratory investigations were negative for a thrombophilic state. During hospitalization the patient presented motor focal seizures in the left upper limb, which resolved with levetiracetam. At discharge, thirteen days after admission, the patient was asymptomatic and neurological examination was normal. An MRI performed one month later showed partial recanalisation. Four months later the patient was still on warfarin and levetiracetam and he was asymptomatic.



Discussion: The recurrence of stereotyped transient focal neurological deficit is rarely encountered in patients with critical stenosis of cerebro-afferent or intracranial vessels, with vasospasm secondary to subarachnoid bleeding, or with capsular warning syndrome. The latter is due to small vessel disease interesting the internal capsule and affects at least two of the face, arm and leg. The differential diagnosis includes seizures, although these are usually shorter and characterized by irritative signs. In our patient, this unusual clinical picture was due to cerebral sinus thrombosis. We could find six reports of similar cases. Headache, which could be the main clue to the diagnosis, was lacking in one patient whereas, in the remainder, it was not always severe and persistent at the presentation of neurological deficits [1,2,3]. Keeping in mind this atypical presentation of sinus thrombosis is crucial for prompt and proper treatment of this dangerous condition.

References:

1. Scutto A. et al.: "Transient ischaemic attack: an exceptional presenting syndrome of a superior sagittal sinus thrombosis." *BMJ Case Rep.* 2013(nov21_1). DOI: 10.1136/bcr-2013-200894
2. Manzano Palomo S. et al.: "Transient ischemic attack: the only presenting syndrome of dural sinus thrombosis." *Neurologia.* 2006 Apr;21(3):155-8
3. Chang D.I. et al.: "Superior sagittal sinus thrombosis and transient ischemic attacks: possible mechanism." *J Korean Med Sci.* 1998 Oct;13(5):566-8