## Primary angiitis of the central nervous system (PACNS)

ANJA BARAČ<sup>1</sup>, IVONA JERKOVIĆ<sup>1</sup>, PETRA NIMAC KOZINA<sup>2</sup> <sup>1</sup>UNIVERSITY OF ZAGREB, FACULTY OF MEDICINE, ZAGREB, CROATIA <sup>2</sup>UNIVERSITY HOSPITAL CENTER ZAGREB, DEPARTMENT OF NEUROLOGY, DIVISION FOR COGNITIVE NEUROLOGY, "REBRO", ZAGREB, CROATIA

## baracanjao@gmail.com

In this case report we present a patient with cognitive impairment as a result of primary angiitis of the central nervous system (PACNS). Our patient is male, age 54, with 15 years of education. Patient presented with difficulty in pronauncing, nasal speech and weakness during period of one year. Neurocognitive status showed impairment of episodic memory and concentration, attention verbal, and visual memory deficiency (MMSE 25). Brain CT scan showed no acute hemorrhage or ischemia, but cronic vascular changes in deep white matter of cerebral hemispheres, basal ganglia, thalamus, and pons with lacunar lesion next to the head od left nucleus caudatus. Brain MRI showed intracerebral hemorrhage in right temporal lobe, multiple gliotic/malacion zone paraventricular, predominant in basal ganglia and hemispheres of the cerebellum. Differential diagnose of multiple intracerebral hemorrhage includes vascular malformations, cerebral amyloid angiopathy, ischemic stroke, cerebral venosus sinus, tumor, cerebral vasculitis etc.

Medical diagnostic included laboratory tests, prostigmin test, EMNG, AchR and MuSK antibodies test, EEG, cerebrospinal fluid analysis. Trought his medical evaluation, which has been performed to exlude any infections or malignant process, we finally conduted cerebral digital subractional angiography (DSA) to diagnose PACNS. Cerebral DSA showed multiple, non significant stenosis on specific vascular segments, impling high suspected vasculitis. After immunologist being consulted, patient was prescribed with metilprednisolon during 3 next days and cyclophosphamide next 6 month. Control DSA is planned in the future. PACNS is one of the most formidable diagnostic and therapeutic challenges to neurologists. Given the low specificity of cerebral angiogram and not uniform clinical presentation, PACNS is best approached by an organized team with expertise in neurovascular disease, immunology or rheumatology, neuroradiology, and neuropathology.

Keywords: cognitive, vasculitis, DSA, hemorrhage