

# INTERVENTIONAL BALLOON-ANGIOPLASTY TREATMENT IN A CASE WITH INTRACRANIAL HIGH-GRADE STENOSIS OF INTERNAL CAROTID ARTERY - 5 YEARS LATER

Ivo Petrov,<sup>1</sup>, Marko Klissurski,<sup>2</sup>

<sup>1</sup> City Clinic Cardiology Center, Sofia; Clinic of Cardiology; Invasive Cardiology, <sup>2</sup> City Clinic Cardiology Center, Sofia; Unit of Neurology; Registration

We present a rare case of an intracranial internal carotid artery (ICA) stenosis successfully treated with balloon angioplasty.

## HISTORY AND PHYSICAL

A 35 year-old woman was admitted to hospital due to subacute weakness in the left limbs, sensory and visual disturbances. She had no vascular risk factors for stroke.

## IMAGING

Brain MRI demonstrated multiple hyperintense T2W lesions in the right parietal lobe (Fig. 1) within the borderline zone of the middle, anterior, and posterior cerebral artery. MRI images were initially considered as multiple sclerosis. CT angiography was performed later.

## INDICATION FOR INTERVENTION

The evidence of a severe ICA stenosis - 1) transcranial color coded sonography (TCCDS, maximal blood flow velocities of 376/190 cm/s in the terminal ICA C1-C2 segments); 2) cerebral angiography showing a short 90%-stenosis of the supra-ophthalmic segment of ICA just before its bifurcation (Fig.2).

## THE INTERVENTION

The intervention performed was supraselective intracranial balloon angioplasty procedure with optimal result. The treatment was performed twice: immediately after the acute stroke and three months later due to a persistent 70% stenosis. Issues in the diagnostics and the choice and success of endovascular treatment of the intracranial ICA stenosis were discussed.

## LEARNING POINTS

On follow-up, with CT-angiography and TCCDS up to 5 years later, the patient was clinically healthy without restenosis and any neurological deficit. Optimal and in-time neurovascular intervention with simple balloon PTA could lead to a vascular remodeling and absolute stroke risk reduction in such cases.

Fig. 1

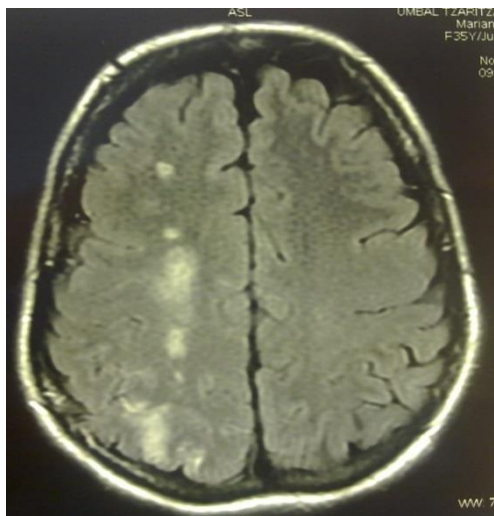


Fig. 2

