

Case report

UDC: 617.7-007.681:616.133-007.253

doi:10.5633/amm.2016.0308

DESCENDENT ATROPHY OF OPTIC NERVE AND SECONDARY BILATERAL GLAUCOMA AS COMPLICATIONS OF CAROTID-CAVERNOUS FISTULA AND ANEURISM: CASE REPORT

*Marija Radenković², Gordana Stanković-Babić^{1,2}, Rade Babić^{1,3},
Jasmina Đorđević-Jocić^{1,2}, Marija Trenkić-Božinović², Maja Živković²*

University of Niš, Faculty of Medicine, Serbia¹
Clinic for Eye Diseases, Clinical Center Niš, Serbia²
Center of Radiology, Clinical Center Niš, Serbia³

Contact: Marija Radenković
Bulevar Nemanjića 67/41, Niš
E-mail: marad@verat.net

Endocranial aneurysm of the internal carotid artery (ICA) is a fusiform or saccular enlargement of the lumen of the blood vessel for at least 50% of the anatomy diameter. Health problem occurs due to compression, rupture, thrombosis, or embolus. Carotid-cavernous fistula (CCF) is an abnormal communication between the carotid arterial system and cavernous sinus (arteriovenous fistula). According to communication, Barrow (1985) classifies four types of CCF: A, B, C, and D. Classification: direct-indirect, traumatic-spontaneous, high-low pressure. Clinical presentation: conjunctival congestion, orbital „brui“, pulsating exophthalmos, ophthalmoplegia externa, secondary glaucoma. The descendent atrophy of the optic nerve is due to a lesion of the third neuron of the visual pathway. Secondary glaucoma is exogenous due to elevated venous pressure (episcleral, v.vortikosae and ophthalmicae). Treatment: embolization of the fistula and medicationous. Herein we present a case of a 59-year-old patient, operated due to the left carotid cavernous fistula and right aneurysm, blindness of the left eye one year after surgery due to descending optic nerve atrophy and concentric constriction of the visual field in the right eye as a result of untimely diagnosed secondary glaucoma after surgery. Presentation considers diagnostic and therapeutic approach to the patient in order to preserve vision in the functionally remaining eye. *Acta Medica Medianae 2016;55(3):57-65.*

Key words: carotid-cavernous fistula, secondary glaucoma, aneurysm of the internal carotid artery, optic nerve atrophy