Ophthalmic artery aneurysm clinical features

Visual impairment secondary to optic nerve compression and its relationship with aneurysm size, pulsation and thrombosis is poorly understood.

45 % present as aneurysmal subarachnoid hemorrhage.

45 % present as visual field defect, see Visual field defect from ophthalmic artery aneurysm.

10 % present as both.

Most commonly, ophthalmic artery aneurysms present with progressive visual disturbance or exophthalmos, although they may be asymptomatic.

In the series of Day, clinical presentations included aneurysmal subarachnoid hemorrhage in 23 cases (29%) and visual deficits in 24 (30%); five patients exhibited both hemorrhage and visual loss. Twenty-eight aneurysms were incidentally identified. Ophthalmic artery aneurysms arose from the internal carotid artery (ICA) just distal to the ophthalmic artery, pointed superiorly or superomedially, and (when large) deflected the carotid artery posteriorly and inferiorly, closing the siphon. Abnormalities relating to vision were not identified until the aneurysm realized giant proportions. The optic nerve was typically displaced superomedially, which restricted contralateral extension until late in the clinical course; unilateral nasal field loss was seen in 12 patients. [1)].

1)
Day A L. Aneurysms of the ophthalmic segment. A clinical and anatomical analysis. J Neurosurg. 1990;72(5):677–691.