

## Unrecognized case of indirect carotid-cavernous fistula

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A 78-year-old woman with an 8-months history of progressive conjunctival injection, increased intraocular pressure and inadequate response to treatment for chronic conjunctivitis and glaucoma prescribed by ophthalmologist was admitted due to severe bilateral visual loss. Neuroophthalmologic examination revealed conjunctival changes (Fig. 1) and multiple retinal microhaemorrhages. Digital subtraction angiography revealed type D indirect carotid-cavernous fistula with both external (primarily right) and left internal carotid arteries supplying cavernous sinus (Fig. 2) (1). Transvenous embolization wasn't performed due to unsatisfactory venous approach.



Fig. 1. — Patient's photograph. Note bilateral conjunctival chemosis and injection with ectropia and skewness of the eyes.

Isolated ophthalmologic findings without history of head trauma or cranial bruit led to late diagnosis and irreversible changes in this patient.

## REFERENCES

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Fig. 2. — Digital subtraction angiography showing filling of the cavernous sinus by dural branches (primarily ascending pharyngeal artery branches) of the right external carotid artery.

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