

Awareness of central retinal artery occlusion (CRAO) on the population, general practitioners and ophthalmologist level in Eastern Switzerland

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Background

CRAO is a serious condition leading to monocular blindness. Re-establishing retinal perfusion might prevent irreversible damage. Data about thrombolysis in CRAO are promising but good evidence is still lacking. Among others this is due to important prehospital delays. The aim of this study was to assess the level of awareness of CRAO symptoms and handling of these patients amongst the general population, general practitioners (GPs) and ophthalmologists in Eastern Switzerland.

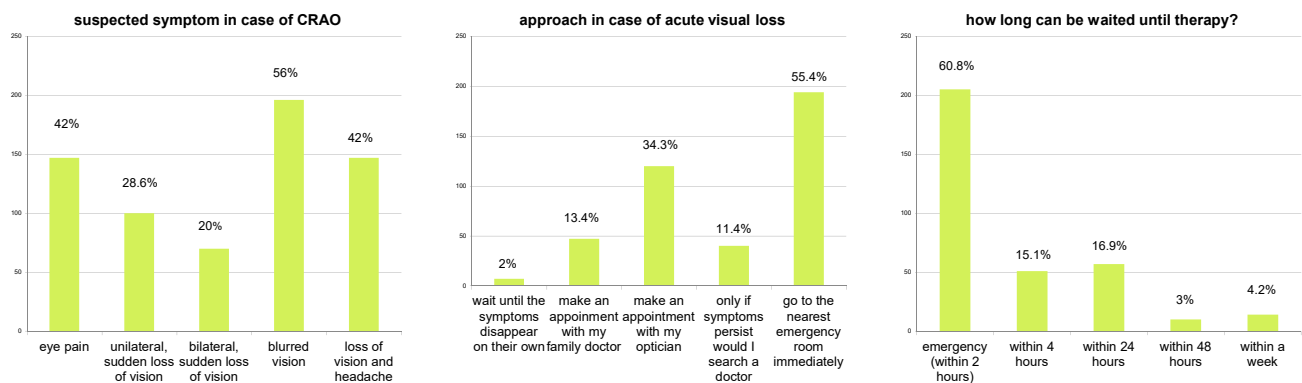
Methods

The survey was carried out between March 2019 and July 2020. The population-level was assessed with a 16 questions questionnaire about demographic data, recognition of CRAO warning signs, underlying causes, and approach in case of acute unilateral visual loss as well as in case of stroke symptoms. GPs and ophthalmologist filled out an online 16 and 11 questions questionnaire, respectively, regarding symptoms of CRAO, differential diagnosis, etiology, approach in case of persistent and temporary acute visual loss, therapy options and time windows.

Results

350 people (42.3% men; mean age 44 years old) participated in the population survey. 28,6% identified an unilateral, sudden loss of vision as a symptom of CRAO. CRAO was considered a medical emergency by 63.1% of them. 55.4% would go to the hospital in case of acute visual loss compared to 89.9% with stroke symptoms. 69.7% identified a temporary visual loss as potentially harmful and would consult a doctor.

66 of 67 (98.5%) surveyed ophthalmologists recognize CRAO as a medical emergency, and 64.2% of them would transfer their patients to a stroke center. Only 23.9% would consider systemic thrombolysis and 41.8 % intra-arterial thrombolysis as a beneficial therapy. All GPs (102) recognize CRAO as an emergency and 88.2 % recognized a sudden unilateral loss of vision as the typical symptom in CRAO. 59,8% of them would transfer the patient to the next stroke center. 55,3% and 37,3% consider intra-arterial and systemic thrombolysis respectively as potentially effective.



Graphic illustration 1 to 3 - Result of the population survey

Conclusions

Awareness of symptoms and urgency of CRAO is rather low on population level in Eastern Switzerland, contrasting the good knowledge in the context of stroke. Although symptom recognition among GPs and ophthalmologist is good the acceptance of thrombolysis as a possible treatment option is low.

Current delays in the prehospital phase in case of CRAO represent the main obstacle for reperfusion therapies/studies. Information campaigns about stroke should also focus on the topic of sudden unilateral visual loss. Reducing prehospital delays will potentially increase therapeutic options and, with this, increase the chance of visual recovery.