Reminder of important clinical lesson

Visual loss following sclerotherapy for varicose veins

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Correspondence to Nicholas Robert Johnston, nic_johnston@yahoo.com**Summary**

The authors report the case of a 66-year-old lady referred to the acute eye clinic with left homonymous hemianopia following sclerotherapy for left lower limb varicose veins and review the literature on sclerotherapy-induced visual loss.

BACKGROUND

Patients are commonly referred to emergency eye facilities with unilateral sudden loss of vision. Taking a detailed history is important, often, as in this case, the patient is actually describing a homonymous hemianopia, occluding each eye is a useful way to check for this. Embolism can be caused by other means than fat and clot.

CASE PRESENTATION

As part of the treatment protocol, patients undergoing sclerotherapy are required to mobilise shortly of completing sclerotherapy. At this point, our patient, who otherwise has no ophthalmic history, reported a loss of the left side of her vision. She was referred to the acute eye clinic immediately by the vascular surgeon who had performed the sclerotherapy.

The patient had self-occluding each eye in turn and noted left field of vision bilaterally; she had no other neurological symptoms.

Within the space of an hour between referral and being examined, symptoms had resolved. Visual fields were normal to confrontation and on automated perimetry. There were no abnormalities detected on comprehensive ophthalmic examination. No carotid bruits were auscultated, and she had normal heart sounds.

INVESTIGATIONS

A transthoracic echocardiogram was reported as normal, but they could not exclude a patent foramen ovale – a potential route for emboli to enter the left-sided circulation.

DIFFERENTIAL DIAGNOSIS

- ▶ Sclerosant embolus
- ▶ Air embolus
- ▶ Venous or arterial embolus
- ▶ Transient ischaemic attack

OUTCOME AND FOLLOW-UP

She had no further symptoms.

DISCUSSION

Sclerotherapy is a widely used outpatient treatment modality for varicose veins with a good safety profile.¹ Transient

visual loss¹ and neurological deficits such as dysphasia² have been reported as a rare, immediate complication of varicose vein sclerotherapy. The hypothetical pathophysiology is air-bubble arterial embolisms arising from the use of sclerosant foam. The presence of a patent foramen ovale, which has a prevalence of 27%,³ would allow access for embolisms into the cerebral circulation. Thus far, there has only been one report of a persisting neurological defect, that is, an ischaemic stroke.⁴ Hyperbaric oxygen therapy as used in diving-related air embolisms has been proposed by an effective intervention in the event of prolonged neurological deficits.⁵

Learning points

- ▶ Taking a good history of loss of vision can point to whether the eye or brain is the source of the abnormality.
- ▶ Sclerotherapy is safe but rarely has neurological consequences, something patients should be warned about before the procedure.
- ▶ Neurological consequences are usually short lived.

Competing interests None.

Patient consent Obtained.

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