CASE REPORT

Unilateral Superior Ophthalmic Vein Thrombosis in a User of Oral Contraceptives

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Summary

A patient on oral contraceptives over several years developed unilateral proptosis, haemorrhagic retinopathy and increase in intraocular pressure.

An orbital vein venogram confirmed the diagnosis of right superior ophthalmic vein thrombosis. There was complete resolution of thrombosis and eye signs and symptoms with discontinuation of the oral contraceptive.

Key Words: Ophthalmic vein thrombosis, Oral contraceptives

Introduction

Oral contraception is widely used and is an acceptable method of birth control. Thromboembolic ophthalmic complications have been reported including retinal artery and vein thrombosis and ophthalmic artery occlusion. Walsh *et al*[1] noted a case at autopsy, with several vessels involved, including left ophthalmic vein occlusion.

This paper reports a case of unilateral superior ophthalmic vein thrombosis while on oral contraceptives. Since this rare case, we have yet to receive another patient on oral contraceptives with eye complications.

Case Report

A 42-year-old lady presented at the University Hospital, Kuala Lumpur in 1986 with redness, pain and proptosis of the right eye for one year. She was gravida 6 and para 4 with a history of preeclampsia during her first pregnancy resulting in still birth. She was on oral contraceptives, Nordette, (Levonorgesteral 150 mcg and Ethionyloestradiol 30 mcg) in between pregnancies since 1974.

She tried injection contraceptives once but switched back to oral due to development of allergic rashes. She had no problems with the pill before. Although she had seen a few doctors over the last one year before her present condition, she was not advised to stop the pill.

Examination showed 6/6 vision in both eyes. Findings were limited to the right eye. There was minimal limitation of movement in the right eye. The intraocular pressure was 28mm Hg in the right and 16 mm Hg in the left. There was right lid oedema. The right eye was proptosed and injected with chemosis and dilated conjunctival and episcleral vessels (Fig. 1).

The right fundus showed dilated and tortuous vessels with retinal haemorrhages. There was no retinal or disc oedema. Physical examination showed a few varicose veins in her right leg. Her blood pressure was 130/

80. She had no history of diabetes or hypertension and she was a non-smoker.

Her ESR was 26mm 1st hour. Her blood sugar, T_3T_4 and serum electrophoresis were normal. Her blood picture was normal. Plain computerised tomography showed right proptosis with no evidence of retrobulbar mass (Fig. 2).

A right orbital venogram was done and showed non-filling of right superior ophthalmic vein with development of collaterals (Fig. 3). Pictures were consistent with right superior ophthalmic vein thrombosis.

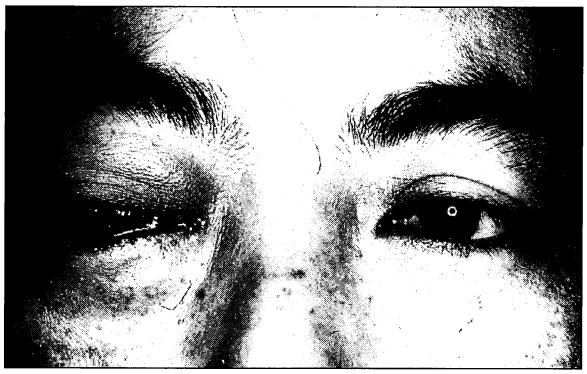

Fig. 1: Picture showing right lid oedema, right proptosis and dilated conjunctival and episcleral vessels

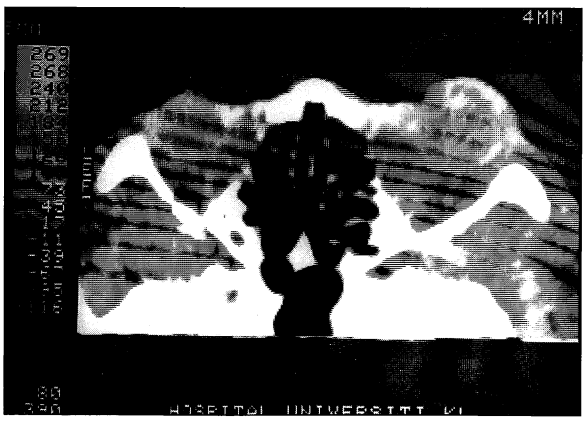

Fig. 2: Computerised tomography showing right proptosis with no retrobulbar mass

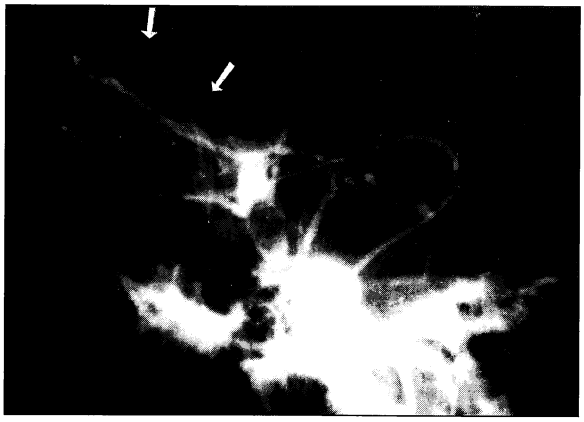

Fig. 3: Right orbital venogram (lateral view) showing collaterals (arrows) and superficial vessels with non-filling of superior ophthalmic vein

Oral contraceptives were suspected and immediately stopped and the patient started using an intrauterine contraceptive device. She was given Timoptol 0.5% eye drops for her intraocular pressure control. There was gradual but definite resolution of proptosis and intraocular pressure to normal over a period of several weeks. Since then the patient has been symptom free.

Discussion

Eye complications in users of oral contraceptives include retinal vascular occlusion, optic neuritis, proptosis and retinal oedema[1&2]. Glaucoma[3] and haemorrhagic retinopathy are also reported.

This patient with varicose veins in her right leg and a history of preeclampsia toxicity had unilateral venous stasis retinopathy with glaucoma and proptosis secondary to ophthalmic vein occlusion. Discontinuation of oral contraceptives resulted in a gradual but complete resolution of signs and symptoms. The fact that her condition was not recognised for a year stressed the importance of taking a history of oral contraceptives and a reminder of the various possible eye complications with the pill.

Neuro-ophthalmic thromboembolic complications with oral contraceptives can be serious. Patients with history

of hypertension, migraine, facial palsy and other vascular disorders are at high risk and the pill should be discontinued with onset of neurological or eye symptoms.

References

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