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SHORT COMMUNICATION

Case report

Pregnancy-related papillophlebitis

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PURPOSE. *To report a case of pregnancy-related papillophlebitis in a woman with an uncomplicated pregnancy and no identifiable coagulation defect.*
METHODS. *Clinical evaluation and fundus photography.*
RESULTS. *Spontaneous recovery occurred post-delivery without treatment.*
CONCLUSIONS. *Venous thromboembolic events of the eye are a rare complication of pregnancy unless associated with toxemia. This case report of a pregnant patient with papillophlebitis indicates that the natural clinical course of this condition is one of spontaneous resolution and treatment is there fore unnecessary. (Eur J Ophthalmol 2004; 14: 65-6)*

KEY WORDS. *Papillophlebitis, Pregnancy, Venous thromboembolic events.*

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Case report

A 32 year old woman presented with a two week history of blurred central vision in her left eye. She was a 37 week primigravida with no history of hypertension, diabetes or thromboembolic disease. She was not taking any medications and was a non-smoker. She had no previous operations and no family history of note.

On examination, her unaided visual acuities were 6/6 right eye, 6/9 left eye. Pupils were equal and reactive. Colour vision was normal in the right eye (15/15) but slightly reduced in her left eye (13/15) on Ishihara testing. Confrontational visual field testing demonstrated an enlarged left blind spot. Anterior segment examination was unremarkable. Posterior segment examination showed a healthy right optic disc but a swollen left optic disc with multiple intraretinal haemorrhages and tortuosity of the vessels (Fig. 1a).

Blood pressure was 130/80 mmHg, blood glucose was normal and there was no evidence of proteinuria. Coagulation, vasculitic and autoimmune antibody profiles were all normal. There was no evidence of Protein C, Protein S or antithrombin III deficiency and Factor V Leiden was absent. Anticardiolipin antibodies were negative. ACE and homocysteine levels were within normal limits as was plasma viscosity.

The patient was referred to a haematologist who performed additional laboratory tests including assessment of platelet function and coagulation factor concentrations. No underlying abnormality was detected.

A clinical diagnosis of pregnancy–related papillophlebitis was made. Following an uneventful delivery of a healthy baby girl by elective caesarean section, our patient reported a gradual improvement of vision to normal. At follow-up, nine weeks post-partum and ten weeks post initial presentation, visual acuities were 6/6 each eye. Colour vision was normal in both eyes and the left optic disc appearance had returned to normal (Fig. 1b).

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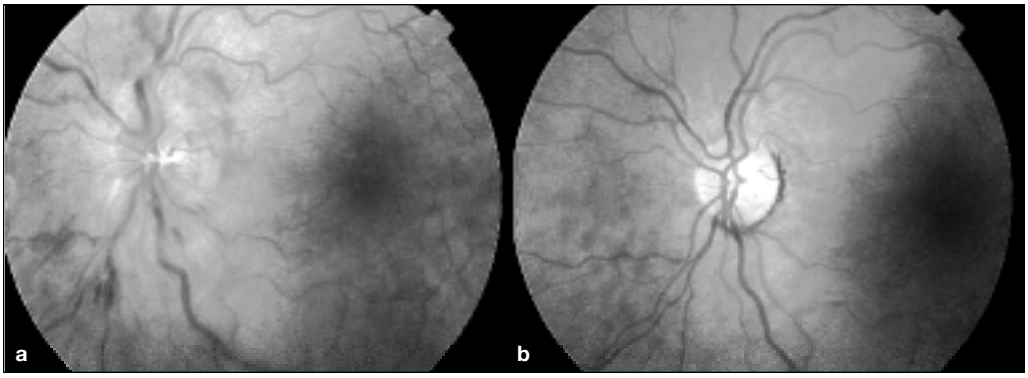

Fig. 1 - a) *Left optic disc at 37 weeks of pregnancy.* **b)** *Left optic disc at 9 weeks* postpartum.

DISCUSSION

Papillophlebitis is a type of central retinal vein occlusion (CRVO) in young people, the exact cause of which is not known. In a review of 103 such cases by Fong A et al (1), only 36% of patients younger than 40 years of age had an associated medical condition, with only 2% of these cases attributable to pregnancy.

The risk of venous thromboembolism in pregnancy is 0.05%-1.8%, six times greater than in the non-pregnant state (2) and is most often observed in the third trimester and post-partum period. About 70% of females who present with venous thromboembolism during pregnancy are carriers of hereditary or acquired thrombophilia (3). Extensive haematological investigation of our patient failed to identify any such clotting abnormalities.

However, normal pregnancy is in itself a hypercoaguable state. Coagulation problems may be related to disorders of the vasculature, platelets or clotting factors, all of which undergo specific, and often unpredictable, changes during pregnancy. These acquired changes in haemostatic factors facilitate the occurrence of thrombosis and increase the risk of deep venous thrombosis, pulmonary embolism and other thromboembolic events in pregnancy.

Our patient developed a unilateral papillophlebitis which was most likely precipitated by the hypercoagulable state of pregnancy. Interestingly, Humayun M et al (4) described a similar case of a 32 year old woman at 37 weeks gestation who developed a left papillophlebitis and associated arteriolar occlusion. The patient was placed on glucocorticoids *post partum* and her vision, visual fields and funduscopic appearance improved almost to normal but the contributing role of the steroids in this case could not be fully established. As our patient had a presenting visual acuity of 6/9, we elected not to commence any treatment during her pregnancy. The papillophlebitis resolved spontaneously post-delivery without intervention and with return of visual acuity to 6/6. Our case would suggest that it is best to observe the pregnant patient with papillophlebitis as the natural clinical course appears to be one of spontaneous resolution.

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