

## Objective

To report a case of branch retinal artery occlusion in a healthy young, pregnant woman.

## Case

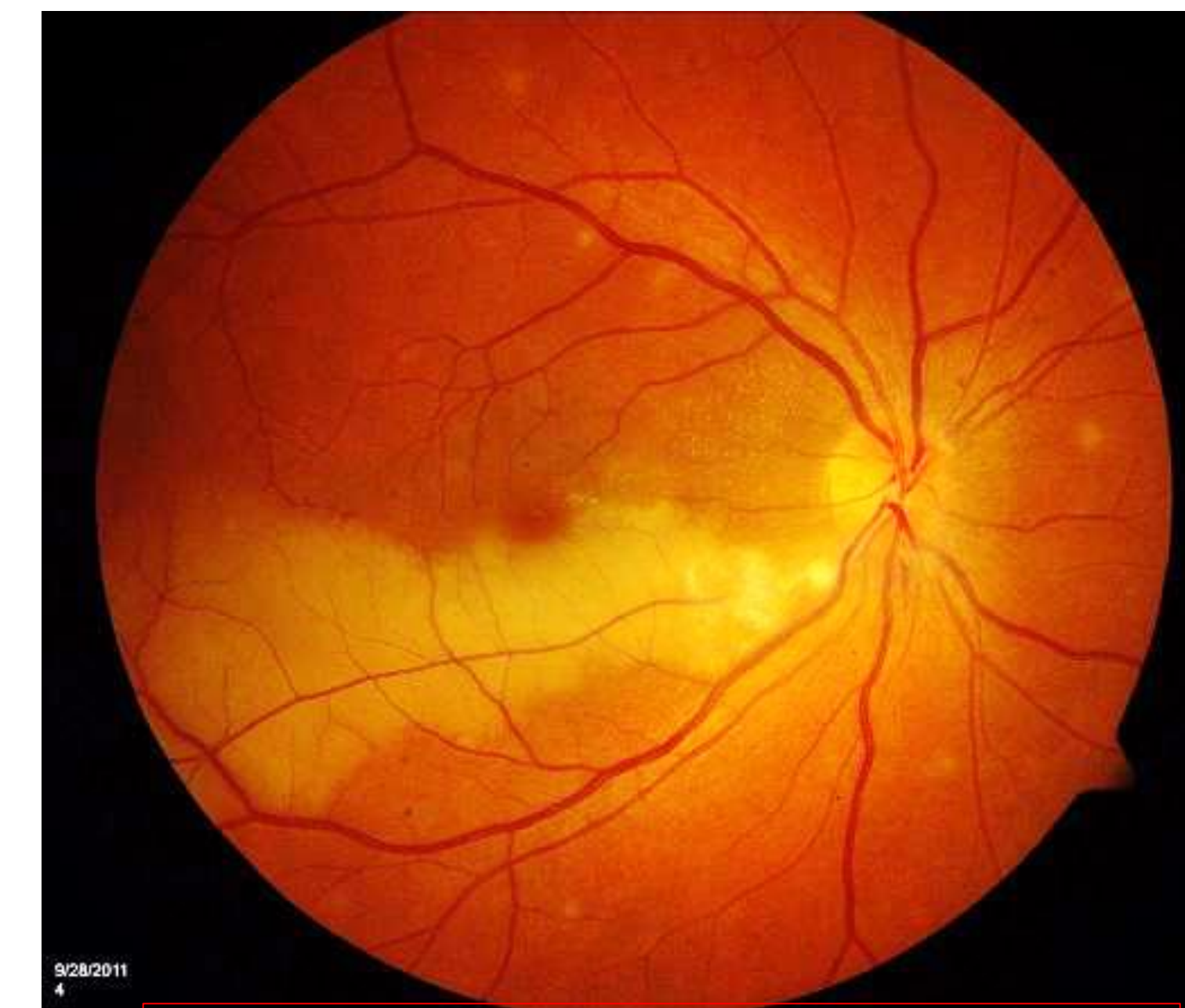
A 31 year-old Albanian woman presented repeatedly with blurred vision and headache from 28 weeks gestation. She was Para 1+0 and she previously had a Caesarean section at 35 weeks for pregnancy-induced hypertension and intra-uterine growth restriction. She was taking prophylactic Aspirin and having regular growth scans. She had occasional headache pre-pregnancy but no other medical history.

She always denied other symptoms of pre-eclamptic toxemia (PET) and her blood pressure remained normal. She had no proteinuria and a low urinary protein-creatinine ratio. Routine examination and PET blood tests were always unremarkable. Cardiotocography was normal and the fetus was growing well on the 75<sup>th</sup> centile. She was admitted for observations at the first presentation and discharged home the following morning.

At 37+5 weeks gestation, she presented again with the same complaints. Blood pressure, urinalysis and PET blood tests remained unremarkable. A visual fields examination by an Obstetrics trainee revealed a left eye segmental field defect. She was referred to the Eye Clinic, where fundoscopy detected a left eye inferior branch retinal artery occlusion .

She was admitted for observations overnight and remained well. She was reviewed by the Neurology, Medical and Haematology teams and was started on Aspirin 300mg daily. Thorough investigations were initiated to look for an underlying cause. She had an elective Caesarean section at 39+2 weeks and had an uneventful postnatal period. She continued Aspirin 300mg and follow up arranged for her in the Eye Clinic and the TIA (transient ischaemic attack) Clinic.

## Discussion



Inferior branch retinal artery occlusion on fundoscopy<sup>2</sup>

Branch retinal artery occlusion (BRAO) is an uncommon disorder that involves obstruction of one of the branches of the retinal artery, usually by an embolus from an upstream vessel. Incidence is less than 0.85 per 100,000 per year.<sup>1</sup>

Patients classically present with an acute, painless, partial visual loss but they may be asymptomatic. Typically, patients are in their seventh decade of life. Diagnosis is by fundoscopy, confirmed by fluorescein angiography. Generally, no specific treatment is required for BRAO and visual acuity improves to normal or near-normal in 80-90% of untreated patients.

The importance of BRAO lies in its association with increased mortality and morbidity secondary to cardiovascular and cerebrovascular disease. Therefore a thorough medical workup is required at diagnosis, which should include an ECG, 24 hour tape, echocardiogram, carotid ultrasonography and fasting glucose and lipid profile.

BRAO is rare in patients under forty years thus additional investigations for coagulopathies, vasculitides and atypical infections are indicated. Long term ophthalmologic surveillance for ocular complications is essential, as is medical management of vascular risk factors.

## Conclusion

- Although retinal artery occlusion is rare in healthy young women, this case highlights the importance of including this in the differential diagnoses of visual disturbance in pregnancy.
- Obstetricians should consider non-obstetric differentials when symptoms repeatedly defy the anticipated diagnosis.

## References

- Rumelt et al. Aggressive systematic treatment for central retinal artery occlusion. *Am J Ophthalmol.* 1999;128(6):733–738
- Nathan et al. Branch Retinal Artery Occlusion. *Medscape.* <http://emedicine.medscape.com/article/1223362-overview>