ABSTRACT
Central serous chorioretinopathy (CSCR) is an idiopathic condition characterized by serous detachment of the neurosensory retina in the macular region. It is relatively uncommon in Africans and though pregnancy is a known risk factor, there are no previous reports of CSCR in pregnant African women. We report the case of a 35-year-old pregnant woman who presented to our clinic at gestational age of 29 weeks with a 4 months history of blurring of vision in her left eye. Examination revealed visual acuity of 6/4 on the right eye and 6/9 on the left eye. She had normal anterior segments bilaterally and a normal posterior segment on the right. However, she had left macular edema with exudates. There was no significant refractive error. Her blood pressure was normal. Investigations including electrolytes and urea, urinalysis, and blood sugar profile were all normal. She was managed conservatively, and symptoms resolved 2 weeks prior to delivery. This is a case report of CSCR in a pregnant Nigerian woman with spontaneous resolution of symptoms prior to delivery. Pregnant women should be educated about the possibility of visual problems accompanying pregnancy.

Key words: Nigeria, ocular manifestations, pregnancy

INTRODUCTION
Central serous chorioretinopathy (CSCR) is an idiopathic condition that is characterized by serous detachment of the neurosensory retina in the macular region. It is thought to occur as a result of a focal leakage at the level of the retinal pigment epithelium (RPE). The leakage manifests as an accumulation of extravasated fluid that accumulates in the subretinal space and separates the neurosensory retina from the RPE.

CSCR typically affects healthy young and middle-aged males. The estimated annual incidence rate is 10/100,000 in men and CSCR occurs 6 times more commonly in men than in women. A number of risk factors have been reported to be associated with the condition including stress, steroids, pregnancy, Cushing’s syndrome, hypertension, systemic lupus erythematosus, antibiotic and alcohol use, and allergic respiratory disease.

The common presenting symptoms are blurred vision, central relative scotoma, micropsia, metamorphopsia, and color vision changes. In most cases, CSCR resolves within a few months, and vision subsequently returns to normal. It is relatively uncommon in Africans and although pregnancy is a known risk factor; to the best of our knowledge, there are no previous reports of CSCR in pregnant indigenous African women.

CASE REPORT
A 35-year-old pregnant woman presented to the eye clinic of the University College Hospital, Ibadan, at a gestational age of 29 weeks with a 4 months history of blurring of vision in her left eye.

Address for correspondence: Dr. Bolutife A. Olusanya, Department of Ophthalmology, University College Hospital, University of Ibadan, Ibadan, Oyo State, Nigeria. E-mail: bolutifeo@yahoo.com

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gestational age of 29 weeks. This was her third pregnancy. She complained of blurring of vision in her left eye, which she had noticed 4 weeks prior to presentation. There was associated distortion of images seen with the same eye.

There was no preceding history of redness of the eye or ocular trauma. She was not a known hypertensive or diabetic patient. She had not been exposed to any stressful event prior to the onset of symptoms, and she was not on any other medications apart from the hematinic medications prescribed at the antenatal clinic. Specifically, there was no history of corticosteroid use.

Ocular examination revealed a visual acuity of 6/4 on the right eye and 6/9 on the left eye. There was no improvement of the left visual acuity with pinhole effect or refraction. Moreover, there was no significant refractive error. She had normal anterior segment in both eyes and a normal posterior segment in the right eye.

Ophthalmoscopy of the left eye showed a serous macular detachment with subretinal exudates with no cells in the vitreous humor. Fundus photography confirmed these findings; however, optical coherence tomography was not performed, as it was not available in our facility at that time. Figure 1 shows the fundus pictures of both eyes obtained at presentation. Fundus fluorescein angiography was not done because of its contraindication in pregnancy.

On systemic examination, her blood pressure was 110/70 mmHg, and there was no pedal edema. Laboratory investigations including electrolytes and urea, urinalysis, and blood sugar profile were all normal.

A diagnosis of left CSCR was made. She was managed conservatively and was counseled appropriately.

She returned for a follow-up visit 2 months after delivery. At that visit, she reported that the visual symptoms had resolved about 2 weeks prior to delivery. On examination, her visual acuity was 6/4 in both eyes, and the left macular detachment had resolved [Figure 2].

DISCUSSION

The primary etiology of CSCR is still unknown, and the pathophysiology is poorly understood. Nevertheless, the central theme of the various proposed theories is the abnormal hyperpermeability of the blood vessels of the choroid layer of the eye, which causes an increase in the tissue hydrostatic pressure, resulting in decompensation and dysfunction of the RPE with associated accumulation of fluid between the neurosensory retina and the RPE. Elevated levels of circulating catecholamines and corticosteroids have been observed in patients with CSCR. These hormonal changes appear to be common in the majority of the identified risk factors for the condition. It has been suggested that the increased serum levels of these hormones result in impaired autoregulation of the choroidal circulation.

Despite the marked male predisposition in the incidence of CSCR, pregnancy is a recognized risk factor, and the occurrence of CSCR in pregnancy may be as a result of the increased endogenous corticosteroids levels associated with pregnancy. In addition, the increased blood volume and other hemodynamic changes that occur during pregnancy may be implicated in the development of CSCR.

Our patient presented with clinical features that were strongly in support of a CSCR diagnosis in pregnancy. First, she presented during the third trimester and this is in concordance with the fact that most cases of CSCR in pregnancy occur in the third trimester. In addition, the fundoscopy finding of unilateral serous macular detachment with subretinal exudates without intraocular inflammation is in keeping with the diagnosis. White subretinal exudates have been observed to occur more commonly in cases of CSCR in pregnancy, in contrast to cases not associated with pregnancy. Moreover, the spontaneous resolution of symptoms around the time of delivery and the return of vision to normal have been the usual descriptions of the course of the condition.

Figure 1: Fundus photographs of both eyes at presentation. (a) Shows a normal posterior pole of the right eye, while (b) shows serous macular detachment (black arrows) and subretinal exudates (white arrow) in the left eye

Figure 2: Fundus photographs of both eyes 2 months after delivery. (a) shows a normal posterior pole of the right eye, while (b) shows resolution of the serous macular detachment.
Other conditions to be considered in the differential diagnosis would include exudative retinal detachment from preeclampsia, but this is quite unlikely because of the absence of hypertension, proteinuria, and pedal edema in our patient.

The course of CSCR in our patient was self-limiting, and she did not require treatment. Treatment, however, is occasionally necessary in patients with CSCR. Indications for treatment include persistence of a serous retinal detachment for more than 4 months, recurrence in an eye with visual deficit from previous CSCR, presence of visual deficits in opposite eye from previous episodes of CSCR, and occupational or other patient needs necessitate prompt recovery of vision. Retinal laser therapy has been found to be quite effective in CSCR and is the current standard of care.6

CONCLUSION

This case report highlights the fact that CSCR does occur in pregnant African women. It also illustrates the need for educating pregnant women about the possibility of visual problems during pregnancy. Specifically, we advocate that antenatal care providers should be aware about this possibility and hence counsel their clients accordingly. Furthermore, women with visual complaints in pregnancy should be referred appropriately for evaluation by an ophthalmologist to ascertain the cause and to institute immediate management. Patients who are confirmed to have CSCR in pregnancy should be followed up closely until resolution. Prompt treatment should be offered when necessary to prevent irreversible visual loss.

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Conflicts of interest
There are no conflicts of interest.

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