BLINDNESS IN PRE-ECLAMPSIA

(A Case Report)

by

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Introduction

Retinal changes in toxaemia may vary from vasoconstriction of the vessels to gross areas of haemorrhages, exudates, massive oedema and finally retinal detachment. The origin of subretinal oedema is debatable. Some claim it to be a part of generalised oedema while others ascribe its presence to spastic changes of the chorroidal arterioles. Retinal detachment seen in toxaemia is of the pure "serous detachment" type. Hence re-attachment and recovery as a rule is spontaneous.

So far there arer case reporst of blindness resulting from retinal detachment only. Siva Reddy (1959) and S. C. Reddy (1981) reported cases of retinal detachment in pre-eclampsia. However there is no case report of blindness resulting from spasm of retinal vessels only without any retinal detachment. In view of the paucity of such cases in Indian literature this case is reported.

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CASE REPORT

A 20 years old, primigravida, in her 7th month of pregnancy, was transferred from a private hospital to the obstetric department of K.E.M. Hospital on 14-9-1981 for sudden loss of vision in both eyes. There was history of headache and vomiting for last 2 days and swelling of feet for 15 days. There was no history of convulsions, unconsciousness or trauma to eyes.

On general examination, her general condition was poor, there was pallor, puffiness of face, pitting oedema of legs upto knees and blood pressure in rt. hand in supine position was 190/120 mm of Hg.

On abdominal examination, uterus was 28 weeks in size with longitudinal lie and cephalic presentation. Foetal heart rate was 136/min. and mild uterine contractions were present. On vaginal examination cervix was 2 cms. dilated and minimally effaced, membranes were present, head was presenting high up.

Fundoscopy findings: Both eyes showed clear media, normal optic discs with well defined margins. There was spasm and generalised narrowing of all arteries, especially the superior nasal branch. The arteries were not visible clearly in the periphery. Veins were full and tortuous. There were no areas of haemorrhages or exudates. Retinal folds or striation were not seen, indicating absence of retinal detachment. The loss of vision was then attributed purely to spesm of arterioles.

Investigations: Urine Albumin, $+\pm+$, Haemogram, blood urea, creatinine, X-ray chest, ECG were normal.

Treatment: Consisted of complete bed rest, sedatives, intramuscular Injection of Pethidine 50 mg., and injection Phenargan 25 mg., alternating every 4 hours with injection Calmpose 10 mg. High blood pressure was brought to safe levels with a Largactil drip of 12.5 mg., maintaining a diastolic pressure of 90 to 100 mm of Hg. Labour was induced with ARM and slow pitocin drip (2.5 units in 500 ml. of 5% Glucose). Within 5 hours of induction, patient delivered a live female premature baby weighing 1.2 mgs. Placenta showed many white infarcts. After delivery blood pressure dropped to 146/94 and sedatives were continued. The baby died within 2 days.

Care of eyes: Consisted of eye rest with use of eye shield, and dilatation of the pupils with homatropine to discourage accommodation. In view of the spasm of vessels, Tab. complamina 1 tab: 3 times a day were started.

Recovery: Post partum recovery was excellent. Owing to continuation of sedatives in lower doses, blood pressure came to normal within 4 days, oedema disappeared in 2 days and urine was devoid of albumin within 8 days of detlivery.

Return of vision: Patient responded well to above treatmetnt. Vision returned gradually over a course of 8 days. Gross vision was first to return; patient was first able to make out shapes and objects and this was later followed by return of fine vision. Serial fundus examinations were done to assess the degree of improvement of vision.

16-9-1981—Both eyes vision finger counting more than 1/4 metres fundus: normal, spasm of arterioles markedly reduced.

18-9-1981—Vision (R) eye 6/18, (L) eye 6/15 fundus: normal.

Refractive index: both eyes—0.75.

20-9-1981—Recovery was however not complete and patient was given a prescription for spectacles:

	Spherical	Cylindrical	Axis
Rt. eye	0.50	—	—
Lt. eye	0.50	—	6/0

Patient was discharged on sixteenth day after admission with above prescription for glasses. One month follow up, showed normal findings specially blood pressure and patient had just started using her spectacles and was satisfied with her vision in both eyes.

Discussion

Blindness as a presenting symptom in pre-eclampsia is very rare. It is almost always bilateral. It occurs principally in the patient with uncontrolled severe toxamia who has had no prenatal care. Since it is always associated with marked changes in the retina, repeated examinations of the fundus are necessary to assess the prognosis of the condition. The basic pathology in pre-eclampsia and eclampsia is generalised arteriolar spasm and eye is the only window in the body which gives us a direct vision of the various states of arterioles, veins, capillaries, retinal nerves and meninges. The prognosis for return of vision is usually good, recovery is spontaneous and almost always complete. The average time for return of vision is one to two weeks. In this case, however, there was partial restoration of normal vision in both eyes following prompt termination of pregnancy and use of complamina tablets, the patient requiring spectacles for improving her vision.

Summary

A case of total blindness in both eyes of a 20 years old primigravida suffering from severe pre-eclampsia is presented. Following delivery of the patient as expeditiously as possible and use of complamina tablets to relieve spasm, there was a spontaneous but partial recovery of normal vision in both the eyes. The patient

was prescribed, at discharge, glasses to improve her vision.

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References

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