

Ophthalmic Complications Following Severe Pre - Eclampsia: A Case of Postpartum Vision Loss

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Abstract: *Ophthalmic complications like choroidal and retinal detachment following severe pre - eclampsia is a rare but well documented entity. In such cases patient can present with sudden painless loss of vision following delivery. In most of the cases this condition resolves over time with complete or incomplete improvement of vision. We present a case of a 29 year old primigravida with severe pre - eclampsia who developed bilateral sudden painless loss of vision on postpartum day1. B - scan revealed choroidal detachment with early retinal detachment in right eye and early posterior vitreous detachment in left eye. With topical and systemic Prednisolone therapy, patient recovered.*

Keywords: ophthalmic complications, pre - eclampsia, vision loss, choroidal detachment, postpartum recovery

1. Introduction

Choroidal and retinal detachment secondary to choroidal ischemia is a documented cause of vision loss seen in pre - eclampsia. ¹Pre - eclampsia is a multi system dysfunction caused in response to circulatory vasoconstricting cytokines leading to hypertension, gross edema and proteinuria. ¹By definition hypertensive changes in pregnancy subsides following termination of pregnancy within 6 weeks and it is expected that the visual recovery should be soon too.

A suspicion of these ophthalmic complications should be kept in mind for the patients presenting complaining of blurring or complete loss of vision in presence of gestational hypertension. Patients complaining of blurring of vision or complete loss of vision in presence of hypertension should be suspected of these known ophthalmic complications and should be managed properly. ²Bedside fundoscopic examination will help to rule out papilloedema. Persistent visual loss warrants further investigations like B - scan and Optical Coherence Tomometry. These modalities will help to diagnose the exudative detachment of choroid or retina. Topical and/or systemic steroid therapy help to resolve the condition. The concurrent presence of persistent proteinuria or raised blood pressure may hamper and alter the prognosis. Most of the cases recover completely gaining full visual acuity; some may have incomplete recovery with residual visual loss.

Herein we present a case of primigravida of 32 weeks of gestational age, known case of severe pre - eclampsia who developed sudden painless loss of vision bilaterally on post partum day 1, on B - scan examination it diagnosed to be choroidal and retinal detachment in right eye and posterior vitreous detachment in left eye. Patient recovered with residual myopia after topical and systemic steroid - Prednisolone therapy. Systemic and topical steroid therapy with management of concurrent hypertension and proteinuria helped to resolve the condition over six months with residual myopia.

2. Case Report

A 29 years old primigravida 32 weeks of gestation by date and 31.6 weeks of gestation by ultrasonographic scan known case of gestational hypertension on tab. Labetelol 100 mg and tab. Nicardipine 10 mg thrice daily came to the emergency with chief complaints of high blood pressure and blurring of vision. On general examination patients was conscious and oriented pulse was 108 /min, BP was 170/110 mmhg Bilateral pedal edema of grade 2 present. On per abdominal examination abdominal wall oedema present, uterus 28 weeks cephalic presentation with non engaged head, fetal heart rate was 140 beats per minute. On per vaginal examination cervical os patulous, 1 cm dilated and poorly effaced. Bed side proteinuria was 4+. Initial management included administration of Antihypertensive drug, Injection magnesium sulphate by Pritchard's regimen. No evidence of papilloedema in both eyes on fundoscopy.

Cervical ripening by Dinoprostone gel for induction of labour done to terminate the pregnancy. Patient delivered after 18 hrs of induction of labour. On postpartum day one patient complained of sudden complete painless loss of vision bilaterally. Ophthalmology reference taken. Patient evaluated with B scan, it showed right eye choroidal detachment and early retinal detachment. Left eye showed early posterior vitreous detachment. According to ophthalmologist's advice, systemic and topical steroid started. On follow up after six weeks, patient's vision improved. Patient developed myopia after 6months with complete recovery from choroidal and retinal detachment.

3. Discussion

Hypertension in pregnancy is diagnosed when patient has blood pressure of more than 140/90 mm of Hg after 20 weeks of gestation, referring it as gestational hypertension. ³When gestational hypertension is associated with proteinuria of more than 30gm per day and edema it's called as pre - eclampsia. ⁴Pathophysiology behind pre - eclampsia is explained by the abnormal placentation causing chronic placental ischemia triggering maternal systemic cytokines release. ⁴Choroidal vasculature gets suffered from this in few patients leading to exudative detachment of choroid, retina,

vitreous or all of them depending upon the severity of the condition. Following termination of pregnancy maternal physiology comes to pre pregnancy state within 6 weeks. Hence the visual recovery is also expected in most of the cases.⁶

4. Conclusion

Pre - eclampsia increases maternal morbidity and mortality. Ophthalmic complication though rare but seen in 3% of the patients. Patients with visual complaints along with pre - eclampsia should be evaluated further to early diagnose the condition like choroidal and retinal detachment. Early diagnosis and medical treatment with steroid therapy improves the prognosis in such patients in ophthalmic point of view.⁵ Simultaneous management of hypertension and proteinuria causes early resolution of ophthalmic symptoms.

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