CASE REPORT

RARE CAUSE OF BILATERAL LOSS OF VISION IN PREECLAMPSIA

K. Revathy¹, B. Varalakshmi²

HOW TO CITE THIS ARTICLE:

K. Revathy, B. Varalakshmi. "Rare Cause of Bilateral Loss of Vision in Preeclampsia". Journal of Evolution of Medical and Dental Sciences 2015; Vol. 4, Issue 11, February 05; Page: 1879-1880.

DOI: 10.14260/jemds/2015/270

ABSTRACT: Preeclampsia and eclampsia syndrome can affect the eye and visual pathways. Visual symptoms concern up to 25% of patients with severe preeclampsia and 50% of patients with eclampsia.¹ Blurred vision is the most common visual complaint, others include photopsia, visual field defects, and in severe cases, complete blindness.²⁻³ We report a rare case where we could identify two causes of loss of vision in the same patient indicating that we should never miss out on complete neurological and ophthalmological evaluation even if one cause is found, as both lesions have different outcomes for the patient.

KEYWORDS: Blindness in preeclampsia/ eclampsia, cortical blindness, retinal detachment in preeclampsia

CASE REPORT: A 24 year old woman, primigravida, twin pregnancy with 36 weeks of gestation presented with complaints of headache and blurring of vision of one day duration. She was on anti-hypertensive treatment. On examination she was conscious, afebrile, anemic had tachycardia with PR-120/min, Blood pressure of 180/110 mm Hg, cardiovascular and respiratory system examination was normal, patient had only perception of light in both eyes, fundus showed macular edema with hypertensive changes, central nervous system examination was normal with no focal deficit.

On laboratory evaluation, she had anemia with Hemoglobin of 8.9 gm/dl, she had thrombocytopenia with platelet count of 1,01,000, however her liver function tests were normal and sr.creatinine was normal. She had albuminuria 2+ with adequate urine output. She was initiated on preeclampsia treatment, within one day patient developed increasing headache and vomiting's, she was delivered under LSCS.

After delivery patient developed increasing drowsiness, GCS of 8, pupils were dilated sluggishly reacting to light, fundus showed bilateral retinal detachment, central nervous system examination showed decreased tone in all four limbs and both plantar's extensor. She was shifted to medical intensive care unit, where CT scan brain was done which showed multiple bilateral infarcts in occipital, parietal and temporal regions. She later developed renal failure and was shifted to higher center for further management.

DISCUSSION: The reason was presenting this case is to emphasize that the cause of blindness in pre eclampsia/eclampsia could be either cortical or local ocular lesions or both as in this patient and neither must be overlooked in presence of one as the final outcome will depend on the cause of blindness. Visual disturbances develop in 25% of women with severe pre eclampsia, but blindness is rare occurrence and of 1-3% incidence is reported with eclampsia.⁴ The most common visual complications of preeclampsia and eclampsia are hypertensive retinopathy, exudative retinal detachment, and cortical blindness. Possible explanations for these complications include coexisting or preexisting systemic vascular disease, changes in hormonal milieu, endothelial damage, abnormal autoregulation, hypoperfusion ischemia, or hyperperfusion edema⁵. Previously retinal causes of

CASE REPORT

blurring of vision and blindness such as detachment and macular edema were commonly implicated but nowadays the emphasis is on cortical blindness. Cortical blindness is characterized by intact pupillary reflexes and normal fundoscopic findings, the vision is usually regained within few hours to 1 week.⁶ Blindness due to retinal detachment was noted in about 1% of preeclampsia/eclampsia patients in a case series.⁷ In patients with retinal detachment spontaneous resolution usually occurs within few weeks and visual prognosis is excellent. After delivery, the subretinal fluid is reabsorbed by the RPE and visual acuity will return to pre-detachment levels within weeks. However, rarely patients with severe preeclampsia may be left with permanent visual loss, despite resolution of the retinal detachment due to extensive RPE necrosis.⁸ Irrespective of the cause of blindness the management centers around the treatment of preeclampsia/eclampsia according to the protocol. Thus the evaluation of patients with loss of vision must include complete ophthalmological and neurological workup.

REFERENCES:

1. Khawla Abu Samra. The eye and visual system in the preeclampsia/eclampsia syndrome: What to expect?: Saudi J Ophthalmol. Jan 2013; 27 (1): 51–53.
2. Schultz K.L., Birnbaum A.D., Goldstein D.A. Ocular disease in pregnancy. Curr Opin Ophthalmol. 2005; 16: 308–314.
3. Sunness J.S. The pregnant woman's eye. Surv Ophthalmol. 1988; 32: 219–238.
4. Dieckman WJ. The toxemias of pregnancy. 2nd ed St Louis: CV Mosby, 1952: 240-49.
5. Bona M, Wong A. The eyes in pregnancy. Ophthalmology Rounds 2007; 5 (3). Published online, May/June 2007. Available from: <http://www.ophtalmologyrounds.ca>.
6. Cunningham FG, Fernandez CO, Hernandez C. Blindness associated with preeclampsia and eclampsia. Am J Obstet Gynecol 1995; 172: 1291-8
7. Jaffe, G. and Schatz, H. Ocular manifestations of preeclampsia. Am J Ophthalmol. 1987; 103: 309–315.
8. The eye and visual system in the preeclampsia/eclampsia syndrome: What to expect? Abu Samra, Khawla. Saudi Journal of Ophthalmology, Volume 27, Issue 1, 51 – 53.
9. Jyotsana, Sharma AK, Bhatt S. Reversible blindness in severe preeclampsia and eclampsia. JK Science 2004; 6: 43-5.

AUTHORS:

1. K. Revathy
2. B. Varalakshmi

PARTICULARS OF CONTRIBUTORS:

1. Associate Professor, Department of Ophthalmology, Kurnool Medical College, Kurnool, Andhra Pradesh.
2. Assistant Professor, Department of Gynaecology, Kurnool Medical College, Kurnool, Andhra Pradesh.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. K. Revathy,
80/63-3, Krishna Nagar,
Kurnool, Andhra Pradesh-518002.
E-mail: revathydhanaraju@gmail.com

Date of Submission: 15/01/2015.
Date of Peer Review: 16/01/2015.
Date of Acceptance: 27/01/2015.
Date of Publishing: 05/02/2015.