Preeclampsia is an obstetric disease of unknown cause that affects approximately 5% of pregnant women. The visual system may be affected with variable intensity, being the retinal detachment a rare complication. The retinal detachment in preeclampsia is usually bilateral and serous, and its pathogenesis is related to the choroidal ischemia secondary to an intense arteriolar vasospasm. The majority of patients have complete recovery of vision with clinical management, and surgery is unnecessary. This is a case report of a 27 year old patient who developed the severe form of preeclampsia on her first pregnancy. She had progressive blurred vision, until she could see only shadows. Ophthalmic examination diagnosed spread and bilateral retinal detachment. With blood pressure control at postpartum, the patient had her retina reattached, and recovery of vision.

Discussion

Preeclampsia is an obstetric disease of unknown cause that affects approximately 5% of pregnant women. It can occur any time after 20 weeks of gestation and up to 6 weeks postpartum. It is characterized by the presence of elevated blood pressure, proteinuria greater then 0.3 g in 24 hours and edema. In its severe form there are observed elevated blood pressure (greater than 160/110 mmHg, or an increase in 30 mmHg in diastolic pressure), proteinuria greater than 2 g in 24 hours, central nervous system disturbances, irritability, headache, vomits, oliguria, elevated BUN, pain in the right upper quadrant and/or epigastrium, visual spots and fundoscopic
changes. HELLP syndrome may occur in the patient with the severe form and is characterized by thrombocytopenia, hemolysis and elevated liver enzymes. The development of seizures in a pregnant woman with preeclampsia makes the diagnosis of eclampsia and usually leads the patient to coma. The manifestations of preeclampsia disappear within 2-20 weeks after delivery, so persistent elevated blood pressure indicates preexistent hypertension.

The visual system may be affected in 30 to 100% of patients with preeclampsia. Blurred vision is the most frequent symptom. Other signs such as photophobia, visual spots and diplopia are sometimes observed, and may be attributed to posterior cerebral artery vasospasm with ischemia, or to cerebral edema in the occipital area. Although alterations in retina and its vasculature are more common, the conjunctive, choroid, the optic nerve and visual cortex may be affected in preeclampsia. The most prominent finding is terminal arteriolar vasospasm, associated with the development of systemic hypertension.

Retinal detachment is a rare complication of preeclampsia, affecting 1–2% of patients with its severe form and 10% of those with eclampsia. It may be present either before or after delivery. It is usually bilateral, bullous and serious and the vascular alterations of preeclampsia are not so commonly seen. Some authors agree that the presence of serous retinal detachment in the mother has no prognostic implication to the fetus’s life. Others, however, believe that maternal and fetal prognosis are worse when there are fundoscopic alterations.

The pathogenesis of retinal detachment is related to choroidal ischemia, secondary to an intensive arteriolar vasospasm that some patients may present. The choroidal vascular insufficiency can lead to lesions in retinal pigment epithelium, fluid transudation and focal retinal detachment, with increasing severity. The majority of patients who manifest serous detachment during pregnancy have, with clinical management, complete recovery within weeks after delivery, not needing any surgical intervention. Some macular sequelae may persist, specially in the pigment epithelium. This case shows the good clinical outcome of retinal detachment in preeclampsia clinically managed.

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References


