

Sudden Visual Loss Due to Conversion After Cesarean Section in a Patient with Preeclampsia

PREEKLAMPTİK HASTADA SEZERYAN SONRASI KONVERSİYONA BAĞLI GELİŞEN ANİ GÖRME KAYBI

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Abstract

Visual loss is a common complaint among patients of different ages with variable presentations. Most common causes of acute visual loss are acute glaucoma, vitreous haemorrhage, central retinal artery occlusion, migraine, cerebrovascular accident or transient ischemic attack. Ischemia is the most common mechanism of acute visual dysfunction. Rarely conversion can also be cause.

A 26 year-old primigravid patient at 36 week gestation with preeclampsia was developed sudden bilateral visual loss after C-section. Patient was evaluated by ophthalmologist, neurology, neurosurgery and psychiatry specialists. All the examinations were normal, so the last diagnosis was thought as conversion.

Post operative sudden visual loss is an important problem requiring urgent investigation. All laboratory and imaging techniques must be done to rule out possible pathologies. Visual loss due to conversion also must be thought.

Key Words: Conversion disorder; vision disorders, vision loss

Özet

Görme kaybı değişik yaşlarda farklı şekillerde oluşan yaygın bir problemdir. Akut görme kaybının en sık nedenleri, akut glokom, vitreus kanaması, santral retinal arter tıkanıklığı, migren, serebrovas-küler olaylar ve geçici iskemik atak şeklindedir. İskemi akut görme bozukluklarında en sık rastlanan nedendir. Nadiren konversiyona bağlı olarak da gelişebilir.

26 yaşındaki 36 haftalık primigravida ve preeklampsi olan hastada sezaryen sonrası bilateral ani görme kaybı gelişti. Hasta göz, nöroloji, nöroşirürji ve psikiyatri uzmanları tarafından değerlendirildi. Tüm muayeneler normal idi. Hastada konversiyon olduğu kararlaştırıldı.

Sonuç olarak postoperatif dönemde gelişen ani görme kaybı dikkatli bir şekilde araştırılması gereken bir problemdir. Tüm tetkikler yapılarak fiziksel bir patoloji olup olmadığı araştırılmalıdır. Konversiyona bağlı görme kaybı olabileceği de düşünülmelidir.

Anahtar Kelimeler: Konversiyon bozukluğu, görme bozuklukları, görme kaybı

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Visual loss is a common complaint among patients of different ages with variable presentations. It usually lasts a few minutes but can persist for hours. Most common causes of acute visual loss are acute glaucoma, vitreous haemorrhage, central retinal artery occlusion (CRAO), migraine, cerebrovascular accident or transient ischemic attack.^{1,2} Ischemia is the most

common mechanism of acute visual dysfunction, and it can affect any aspect of the visual system. Ischemia reduces delivery of oxygen and other important nutrients to tissues, causing metabolic compromise of cells. Functional deficit may be temporary or permanent, depending on the degree of damage.¹

Transient bilateral visual loss is almost always associated with severe occlusive disease of the internal carotid artery (ICA), aortic arch, or bilateral occipital lobe ischemia. Rarely conversion can cause transient visual loss.¹

In this study a preeclamptic woman with transient bilateral visual loss caused by conversion disorder was evaluated.

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Case Report

A 26 year-old primigravid woman at 36 weeks gestation without any prenatal care was admitted to our clinic for high blood pressure. Her arterial blood pressure (BP) was 160/100 mmHg, heart rate 88 bpm and she was afebrile. She didn't have complaints of nausea, vomiting or epigastric pain. She had bilateral pitting pedal edema up to knee level. All laboratory tests including complete blood count, prothrombin time, partial thromboplastin time, hepatic and renal function tests were in normal range. Urinary protein was 1+. She was hospitalized for regulation of BP. Her BP was fairly well controlled. During 2nd day of hospitalisation fetal distress was detected in non-stress test and she underwent C-section. Male infant weighting 2600 g was born. Newborn baby was sent to neonatal intensive care unite due to respiratory distress.

There wasn't any complication during the operation. Also no bleeding more than normal was occurred. After operation she was transferred to the maternity ward and her BP decreased from about 160/100 mmHg to 130/90 mmHg and remained stable at this level. When she awake completely from anesthesia, she complained of total blindness in both eyes.

Patient was evaluated first by ophthalmologist. Visual fuctions and fundus examination were normal. Visual evoked potentials (VEPs) were also done. The results were normal. Patient was also consulted by neurology, neurosurgery and psychiatry specialists. There was no pathologic sign in CT and MRI of the patient. All the examinations were normal, so the last diagnosis was thought as conversion. Patient was brought to neonatal intensive care unit to show her baby on postoperative 2nd day. When she went to neonatal intensive care unit to see her baby, she started to see fully again. Patient was send home at 5th postoperative day with her baby without any problem.

Discussion

Acute visual loss is defined as a rapid reduction in visual acuity over a short period of time. It may be dramatic in presentation and most patients require an urgent ophthalmologic opinion.³

Most common causes of acute visual loss are acute glaucoma, vitreous haemorrhage, central retinal artery occlusion (CRAO), migraine, cerebrovascular accident or transient ischemic attack. Other causes are central retinal vein occlusion, retrobulbar (optic) neuritis, retinal detachment, temporal arteritis and posterior uveitis. Rare causes of acute visual loss are hysteria (conversion), cortical blindness (non-vascular), optic nevre injury and quinine poisoning.¹

Visual loss in obstetric patients can be due to preeclampsia and eclampsia. Visual disturbances may present in 25% of patients with pregnancy induced hypertension. But complete visual loss is rare and an incidence of 1-3% is reported with eclampsia.⁴ The cause of visual loss in preeclampsia is attributed to varying degrees of retinal abnormalities that include edema, vascular changes and detachment and/or occipital lobe ischaemia or infarction. Retinal detachment may cause altered vision although it is usually one sided and seldom causes total visual loss.⁵ Cortical blindness associated with preeclampsia-eclampsia, which is characterized by intact pupillary response and normal ophthalmoscopic findings results from petechial hemorrhages and focal edema in the occipital cortex. These lesions are likely stimulated by disparity in cerebral regional blood flow that is characterized by vasospasm and diminished flow primarily affecting the posterior circulation.⁶ In this case, no pathologic finding was detected that can cause blindness due to preeclampsia.

Perioperative visual loss has received increased attention over the last decade. The etiology of perioperative visual loss is unclear but may be associated with decreased oxygen delivery to the optic nevre.⁷ Many factors such as hypotension, anemia, long duration in the prone position, large blood loss, fluid management, adverse drug effects, and unique anatomical variations in optic nerve blood supply have been proposed as contributing to this complication.⁸ Patient-dependent factors include hypertension, tobacco use, atherosclerosis, diabetes and morbid obesity.^{7,9} The most common operations associated with perioperative visual loss are cardiac bypass procedures, spine

surgery in the prone position, and head and neck operations.⁹

Acute-onset visual loss requires urgent ophthalmologic consultation.³ Ophthalmologic exam is the first and only essential test that should be ordered for any patient with acute visual loss. Visual acuity, intraocular pressures, color testing, gross visual fields, pupillary reflexes and fundoscopy with pupillary dilation should be performed. CT and MRI should demonstrate occipital cortical strokes consistent with cortical blindness. MRI is not particularly sensitive for detecting early ischemia of the optic nerves, but may occasionally show swelling or abnormal signal intensity. Electroretinograms (ERG) are sensitive detectors of retinal ischemia and can be useful for detecting CRAO, though fundoscopic exam should be sufficient for diagnosing CRAO with a finding of the pathognomonic cherry red spot. VEPs detect abnormalities of the optic nerve and its projections to the occipital cortex. Angiography and EEG may be useful in some patients.¹⁰

Conversion disorder is a rare cause of acute visual loss. It is one of several types of somatoform disorders. Somatoform disorders are marked by persistent physical symptoms that cannot be fully explained by a medical condition, substance abuse, or other mental disorder, and seem to stem from psychological issues or conflicts.¹¹

Conversion disorder may present at any age but is rare in children younger than 10 years or in persons older than 35 years. It appears to be somewhat more common among women. Women patients outnumber men by 6:1.¹²

The onset of symptoms in this disorder is usually very sudden and follows a stressful experience. The symptoms of conversion disorder involve the loss of one or more bodily functions. These may include visual loss, paralysis or the inability to speak. The loss of physical function is involuntary and diagnostic testing does not show a physical cause for the dysfunction.

A physical examination is performed to rule out physical causes for the loss of function. Specific diagnostic testing related to the symptom is warranted to rule out a physical cause.

Symptoms usually last for days to weeks and may resolve spontaneously. Usually the symptom itself is not life-threatening, but the development of complications as a result of the symptom can be debilitating.

A trusting physician-patient relationship is essential. After the physician has excluded a physical disorder and reassured the patient that the symptoms do not indicate a serious underlying disorder, the patient usually begins to feel better and symptoms fade. When a psychologically distressing situation has preceded symptom onset, psychotherapy can be effective.

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