Transient posttraumatic cortical blindness

Case series

1993

Five patients: three children, one adolescent, and one young adult, examined in an emergency room setting were diagnosed with post-traumatic transient cortical blindness. This syndrome is characterized by transient visual loss, normal pupillary response and normal funduscopic examination following minor head trauma. In each case, vision returned to normal within minutes to hours following injury, leaving no neurological sequelae. Headache, confusion, irritability, anxiety, nausea and vomiting were the most common related symptoms. While the mechanism responsible for the transient blindness is unknown, most authors propose an abnormal vascular response to trauma with resultant transient hypoxia and cerebral dysfunction. The similarity between the symptoms accompanying this syndrome and those seen during a classic migraine attack has led many investigators to suggest a common underlying pathophysiology [1].

1986

Six children who sustained head trauma of varying degrees experienced self-limited cortical blindness–complete bilateral visual loss associated with normal pupillary responses to light. In five cases associated with relatively minor head trauma, full visual function returned within 24 hours. In the other case, associated with parietal and occipital contusions, the period of complete blindness was prolonged, lasting 1 week, followed by a striking recovery over an additional week. A bilateral inferior altitudinal visual field deficit has persisted over 6 years, with emergence of a complicated migraine syndrome. Sequential computed tomographic (CT) scans over a 4-year period demonstrate bioccipital and right parietal injury, correlating clinical and anatomic findings. This case is the first description of prolonged transient post-traumatic cortical blindness in a child with CT correlation. It underscores the clinical, radiographic, and pathophysiologic differences between syndromes of brief and prolonged transient post-traumatic cortical blindness in childhood [2].

Case report

Yilmazlar et al., report a case of acute posttraumatic cortical blindness due to intracranial epidural hematoma at the confluence sinuum caused by venous sinus tearing. The epidural hematoma was evacuated and the dural tear was repaired. The patient remained alert throughout the hospitalization. Examination of the visual field revealed recovery postoperatively, and the patient was discharged [3].

1)
Rodriguez A, Lozano JA, del Pozo D, Homar Paez J. Post-traumatic transient cortical blindness. Int Ophthalmol. 1993 Oct;17(5):277-83. PubMed PMID: 8132407.
2)
Kaye EM, Herskowitz J. Transient post-traumatic cortical blindness: brief v prolonged syndromes in childhood. J Child Neurol. 1986 Jul;1(3):206-10. PubMed PMID: 3598126.
3)

Yilmazlar S, Taskapilioglu O, Aksoy K. Transient Anton's syndrome: a presenting feature of acute epidural hematoma at the confluens sinuum. Pediatr Neurosurg. 2003 Mar;38(3):156-9. PubMed PMID: 12601240.