

Headache as the main presenting symptom of iritis

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Abstract

Headache is one of the most common outpatient pain conditions encountered in both the private practice and emergency departments. Recognition of serious causes of headache requires a standardized diagnostic approach to history and examination. We will report a patient with iritis associated with elevated intraocular pressure (IOP) that presented with severe sudden onset headache mimicking intracranial hemorrhage. A 60-year old man, a known case of non-insulin dependent diabetes mellitus, referred to the emergency room due to severe, sudden onset of headache associated with nausea without any complaint of ocular problem except mild redness of the left eye. Considering subarachnoid hemorrhage subsequent work ups including brain CT scan and lumbar puncture were performed which proved to be inconclusive. The intraocular pressure (IOP) of the left eye was 50 mmHg and there was significant cell and flare in the anterior chamber. IOP was controlled by administration of intravenous mannitol, topical antiglaucoma medications and steroid eye drops. The symptoms were relieved within a few days. This manuscript propounds the importance of the awareness of the possibility of serious headache as the presentation of ocular problems.

Keywords: Anaplastic thyroid carcinoma; Surgical intervention; Cancer

Introduction

Headache is one of the most common outpatient pain conditions encountered in both the private practice and emergency departments.¹ Recognition of serious causes of headache requires a standardized diagnostic approach to history and examination coupled with an awareness of a relatively small number of important secondary headache disorders.² One of the sources of the secondary headache is ocular problems.¹ On the other hand, some of the brain vascular problems can be accompanied by ocular vascular congestions mimicking a simple conjunctivitis. Ignoring this important entirety creates either hazardous complications or otherwise unnecessary work ups that postpone the suitable management in the critical periods.^{3,4} Here, we will report a patient with iritis associated with elevated intraocular pressure (IOP) that presented with severe sudden onset headache mimicking intracranial hemorrhage.

Case Report

A 60-year old man, a known case of non-insulin dependent diabetes mellitus, referred to the emergency room due to severe, sudden onset headache associated with nausea without any complaint of ocular problem, except mild redness of the left eye. Considering the subarachnoid hemorrhage, subsequent work ups including brain CT scan and lumbar puncture were performed which turned out to be inconclusive. During the hospital course, the co-existing redness of the left eye became prominent and the patient developed severe ocular pain so that he was referred to the Ophthalmology Department of Khalili Hospital to detect any possible pertaining problem. The best corrected visual acuity was 20/20 in the right eye and 20/200 in the left eye. The intraocular pressure (IOP) of the right and left eyes was 14 mmHg and 50 mmHg, respectively. The positive findings of slit lamp examination were corneal edema and the presence of cells and flare in the anterior chamber of the left eye. Moreover, the fundoscopic exam of the left eye was not possible due to corneal edema. Accordingly, IOP was controlled by administration of intravenous mannitol, topical antiglaucoma medications and steroid

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Received: October 19, 2006 Accepted: April 08, 2007

eye drops. In the systemic investigation, no abnormality other than the diabetes mellitus was detected as a cause of iritis. The patient was followed for 6 months and subsequently the topical medications were tapered and discontinued while IOP was maintained on 16 mmHg and vision was improved to 20/20.

Discussion

This report puts forward the significance of awareness about the possibility of headache as one of the serious presentations of ocular problem. This is important since the mild ocular congestion accompanied by severe headache pertaining to the hazardous brain vascular problem may result from a pure ocular problem that keeps the patient away from unnecessary work ups. Glaucoma and iritis are the two main examples in this relation.^{3,4} Iritis was first reported in association with diabetes over 130 years ago.⁵ Rothova et al.⁶ and Castanga⁷ and colleagues observed iritis in 6% and 7.1% of diabetics, respectively. The etiology of iritis in association with diabetes is unknown. Guy and colleagues⁵ agreed with an immunological cause based on their findings of an association between iritis and autonomic diabetic neuropathy. However, Castanga et al.⁷ failed to reveal any convincing immunological abnormality, vasculopathy and neuropathy in their patients. Therefore, true

pathophysiology of this condition is a subject of controversy. During the acute inflammatory episode of iritis, the IOP is often decreased due to ciliary's body shutdown and subsequent reduction in the aqueous humor production.⁷ This is, however, not always true because the final IOP is based on the facility of outflow through the trabecular meshwork which may be impaired by the accumulation of inflammatory materials and debris in the setting of iritis.^{7,8} While the sudden rise in IOP in patients with iritis can be manifested by headache, nausea, vomiting, ocular pain and blurred vision, severe headache pertaining to increased IOP in the manner presented in this case has not been reported in iritis till now. However, it is emphasized numerously in the elderly that systemic disturbances may be severe enough to mask ocular symptoms and lead to misdiagnosis and unnecessary work ups. So, it is reasonable to consider ocular problems in the differential diagnosis of serious systemic problems especially in the elderly.

Acknowledgements

The authors would like to thank Dr. D. Mehrabani, Miss Gholami and Mrs. Ghorbani at Center for Development of Clinical Research of Nemazee Hospital for editorial and typing assistance.

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