Reviewer’s report

Title: Reversal of isolated unilateral optic nerve edema with concomitant visual impairment following blunt trauma: a case report

Version: 2 Date: 5 August 2007

Reviewer: Patrick Yu Wai Man

I am familiar with the literature and believe that this case meets one of the 7 criteria for evaluation in the journal: An unexpected event in the course of observing or treating a patient

Has the case been reported coherently?: No
Is the case report authentic?: No
Is this case worth reporting?: No
Is the case report persuasive?: No
Does the case report have explanatory value?: No
Does the case report have diagnostic value?: No
Will the case report make a difference to clinical practice?: No

Comments to authors:

…revealed a visual field loss in the right lower quadrant with absent organ pathology…

What were the actual visual acuities (Snellen or Log Mar)?
What does the author mean by absent organ pathology? Does it mean that there was no disc swelling or retinal changes on fundoscopy?

………The patient’s symptoms responded quickly to this approach and decompression was not indicated…

The actual visual improvement needs to be clearly stated.

…The further sequelae of the patient was uneventful……

I think this sentence should be rephrased for clarity.
Computed tomography, that was negative in our case, has come to play a major role in the orbital examination of acute trauma patients and defines fractures, bony fragments or hematoma directly impinging on the optic nerve.

The indication for neuroimaging remains a controversial issue and practice varies worldwide. Some clinicians request CT or magnetic resonance imaging (MRI) or both for all cases, whereas others limit them to those patients with progressive visual deterioration or when therapeutic interventions are being considered. The clinical usefulness of neuroimaging in TON remains debatable since there is no consistent correlation between the finding of an optic canal fracture, severity of visual loss and prognosis for visual recovery.

The early use of steroids in the course of treatment is widely accepted although the lack of prospective clinical trials has perpetuated controversy as to the optimum treatment of patients with traumatic optic neuropathy.

A different word to “perpetuated” should be used.

We have recently conducted a systematic review of steroids and surgery in traumatic optic neuropathy (TON).

1. Yu Wai Man P, Griffiths PG. Steroids for traumatic optic neuropathy. Cochrane Database of Systematic Reviews. 2007 [In Press]


The author also fails to mention the findings of the largest prospective trial of TON published to date and its findings in their discussion.


There is a relatively high rate of spontaneous visual recovery in TON and no robust data that steroids provide any additional benefit over conservative management. Based on the current evidence, TON cases presenting more than 8 hours after the initial injury should not be treated with steroids. The decision to initiate treatment for patients seen within the 8-hour window remains controversial and the supporting evidence is weak. The patient presented in this case report received steroids > 2 days after the initial trauma.

Similarly, there is no evidence that surgical decompression of the optic nerve has any role to play in the management of TON. On the other hand, surgery carries a definite risk of complications such as postoperative cerebrospinal fluid leak and meningitis.

Conclusion
TON is a well recognised complication following road traffic accidents and as such this case report does not describe anything new. There is an extensive literature around the controversy surrounding the use of steroids and surgical decompression in the management of TON which the author fails to discuss and put in context. Steroids and surgery cannot be considered the standard of care in TON based on the current evidence available.

What next?: Reject

Quality of written English: Needs some language corrections before being published