Reviewer’s report

Title: The use of nerve growth factor in herpetic keratitis: a case report

Version: 7 Date: 3 September 2007

Reviewer: Yong Ming Por

I am familiar with the literature and believe that this case meets one of the 7 criteria for evaluation in the journal: Presentations, diagnoses and/or management of new and emerging diseases

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: No

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: Yes

Comments to authors:

General

This is an interesting article looking at the use of Nerve Growth Factor (NGF) in the treatment of acyclovir resistant Herpes Simplex (HSV) keratitis.

Although its use in this case ended with healing of the epithelial keratitis, the inclusion of other data about the patient would help the reader assess the role of NGF.

1) Although the patient was HIV positive, we do not know how immunocompromised he was. The inclusion of a CD4 count would have been useful.

2) Was the patient on Highly Active Anti-Retroviral Treatment (HAART)? This would also help to boost the immune system, and help ulcer healing, independently of any effect of the NGF.

It is well known that in the era before the advent of acyclovir, herpetic dendritic keratitis would often heal of its own accord, and that therapeutic epithelial debridement would often speed recovery. Was this performed for the patient? From this isolated case report, it is not really possible to differentiate between
spontaneous healing and healing attributable to NGF, and the authors need to acknowledge this possibility.

The authors base this study on the fact that NGF may block HSV reactivation and can repair neurotrophic ulcers. However, the authors do not mention whether this ulcer was neurotrophic. A statement on the corneal sensation of this patient would be useful.

Following on from this, a pilot study comparing NGF and placebo and acyclovir would be helpful to establish the usefulness of this treatment modality, and not just its use 'on a larger number of cases'. Following a pilot study, a randomized controlled trial could be considered, although patient recruitment might be a limiting issue.

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Revisions necessary for publication

Most of the section under 'conclusions' is really 'discussion', and the heading should be amended as such.

Reference 5: The word 'factor' is stated twice.

Please ensure proper grammar throughout eg., under conclusions line 3, 'To became active…' should be 'To become active…'.

Please ensure uniformity of format of the references. Eg., Reference 4, semi-colon is used before page numbers instead of colon, reference 2, page numbers is not written in full.

What next?: Revise and resubmit

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