Reviewer’s report

Title: Drug-induced dyskinesia in Parkinson's disease. Should success in clinical management be a function of improvement of motor repertoire rather than amplitude of dyskinesia?

Version: 3 Date: 16 October 2012

Reviewer: Tom Johnston

Reviewer’s report:

The commentary by Daneault and colleagues aims to provide a review of current management of dyskinesia and an opinion as to how this might be optimised. To this end the authors make the argument that dyskinesia might be considered part of ‘signal to noise’ ratio equation and stress the importance of considering not only the amplitude (severity) of dyskinesia but the concomitant level and, moreover, specific phenomenology of accompanying parkinsonism.

Major Compulsory Revisions

As a prelude to the main subject of the manuscript, the authors provide a generally well written account of dyskinesia and cover, briefly, aspects pertaining to mechanism, current and novel treatments and clinical relevance and management. These expansive and complex subtopics have been covered rather superficially with much of the detail and depth regarding mechanisms of dyskinesia, animal models and novel therapies in development instead being summarised and referenced to other publications that cover the material in greater depth. This would not be such an issue were it for the fact that once these previously well-reviewed topics have been excluded (consider pages 1-14) then the remaining central tenet of the commentary appears to amount to very little.

The authors make reference to the well-established clinical approach that a reduction in levels of dyskinesia, either by a modification of dopaminergic replacement therapy or supplementation with adjunct treatment, is rendered meaningless if a concurrent compromise of the anti-parkinsonian benefit of L-DOPA is also in evidence. Thus far, nothing new. However, the authors then make a well argued and reasonable series of points highlighting that clinical management must be considered in an integrated way and that rigid adherence to rating scales which assess dyskinesia and parkinsonism in isolation or as a ‘total’ disability rating without regard for anatomical localisation or motor repertoire specific for that patient is inappropriate.

If it is the intention of the authors to make this issue known to the broader medical community practising outside of specialist movement disorder centres then such a commentary is deserved. However, any physician operating within such a centre would be well aware of these caveats to successful patient
management and as such a further iteration of an often voiced topic would seem unnecessary. As such, while there is nothing fundamentally wrong with this manuscript, its importance is somewhat questionable.

Minor Essential Revisions

There are a few typographical errors in the text. For example;
Page 5, 2nd line from the bottom, “and can only difficulty…”
Page 6, 1st line – missing review reference
Page 13, 2nd line – fold, not folds
Page 14, million$ notation incorrect

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

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I have no competing interests to declare