Reviewer's report

Title: Effects of Cardiovascular Exercise Early After Stroke: A Meta-Analysis

Version: 2 Date: 13 March 2012

Reviewer: Rayaz Malik

Reviewer's report:

This is a methodologically sound meta-analysis of an area where data are limited to small numbers of patients which include both randomised and non randomised studies and when the intervention has been undertaken in the non-acute phase following stroke.

It clearly shows the limited numbers of patients recruited into the limited number of eligible studies (n=11, although 3 studies were from the same sample!) and is therefore able to draw some guarded conclusions regarding benefits of aerobic exercise following acute stroke.

Of course there is inherent bias in terms of patient recruitment in only those individuals who presumably had minimal deficits and therefore the conclusions are not generalizable. The intervention in terms of type of exercise and frequency was comparable across studies.

Primary outcomes were robust and included peak oxygen uptake (VO2peak), peak work rate (WRpeak), peak heart rate (HRpeak), heart rate variability, or the 6 Minute Walk Test (6MWT). Both VO2 and 6MWT do show consistent improvement.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

None