Reviewer's report

Title: Beneficial Effects of Physical Activity in an HIV-infected Woman with Lipodystrophy: a case report

Version: 2 Date: 2 February 2010

Reviewer: James Lin

Which of the following best describes what type of case report this is?: Other

If other, please specify:

Although well written, I'm a bit confused as to what type of case report this is. At times I feel like it is a description of a case but at another, I feel like it is a mini-research paper or project with 1 subject.

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: Yes

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?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

This paper is thoughtful and generally well written. However, I'm not sure if this is a research paper with 1 subject (N=1) or a case report based on its format and content.

A couple of published papers have demonstrated the association between anti-retroviral use and the development of metabolic syndrome and
lipodystrophy. At the same time, we also know that physical activity and exercise are effective in addressing obesity as it plays an extremely important role in a healthy lifestyle modification, let alone helping those conditions mentioned above. We also know that physical activity and exercise can improve moods as well. So I'm not sure how this case would teach us something that we don't already know. In addition, it was never mentioned how QoL was measured or assessed—was it based on a questionnaire or informal acquisition versus a standardized research validated protocol i.e. WHO Quality of Life-BREF.

If this were a research type case report, I have the following comments: In Table 2: Exercise Intervention Design, 8-10 reps were noted for resistance training. So what were the exact exercises that the subject was participating in? Also diet was never mentioned. Would a healthier diet be a confounder in the positive finding? Were other "unhealthy" habits controlled for? In the discussion section, "We have shown that a 12-week exercise program results in weight gain......" Again, was this solely attributed to the exercise program or perhaps due to exercise, the subject ate more from an improved appetite?

In summary, if you could address the above and also discuss in more detail "how you would counsel your patients to become more active with his or her physical activity or how you would make sure your patients are compliant with a prescribed exercise regimen" in the case of HIV patients and lipodystrophy, then it would be practical and worthwhile for readers.

**Quality of written English:** Acceptable

**Declaration of competing interests:**

I declare that I have no competing interests.