Reviewer's report

Title: Reliability of Computed Tomography measurements in assessment of thigh muscle cross-sectional area and attenuation in patients with anterior cruciate ligament injury

Version: 1 Date: 25 May 2010

Reviewer: Yong Seuk Lee

Reviewer's report:

This is the review of “Reliability of Computed Tomography measurements in assessment of thigh muscle cross-sectional area and attenuation in patients with anterior cruciate ligament injury”

This is a very interesting paper, and one that attempts to study an area of growing interest. However, there a number of major problems that should be dealt with. Furthermore, the writing style and structure of the manuscript prohibited such findings to be clearly delivered to the readers, and will require a significant revision to be better present the rationale, purpose, methodology, findings, and clinical relevance of the study. I will outline these below.

Title:

You evaluated the ACL patient. However, there is no content concerning ACL. You must discuss or evaluate ACL specific factors or change your title.

Introduction:

It is relatively well written. However, the aim of this study is too simple and I recommend to evaluate specific ACL injured patients

Methods:

You used different CT-scanner in 5 patients. Why?

Why did you evaluate only 150mm?

When did you evaluate? It is important to the ACL injured patients when did you evaluate.

With my opinion, the quadriceps is divided into 4 groups and VMO shows prominent atrophy. Why don’t you evaluate separately 4 groups?

Results:

The first paragraph is more profitable in the first section of discussion.

Your study must include the difference between the healthy and affected side although you said that it would be the subject of a future study. Without this point, the power of your study is too low.
Discussion:

You must start with the discussion with principle findings of your study. Also, you must review relevant studies and describe limitations of this study. Please reorganize with the first paragraph of results.

Add ACL specific factors.

Please let me know if there are any questions or comments about the above review.

Level of interest: An article of importance in its field

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

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

Declaration of competing interests:

'I declare that I have no competing interests'