Reviewer's report

Title: The effects of twelve weeks knee-specific training on knee kinematics and kinetics during gait, step and hop in male former soccer players with a 16-year-old ACL injury.

Version: Date: 14 December 2006

Reviewer: Charles Swanik

Reviewer's report:

General
This manuscript presents unique data on injured subjects sixteen years after insult. Part of this may not be emphasized as well as it could be. The notion of a stiffening strategy also was not developed thoroughly and the introduction or discussion. Therefore because it was not directly measured should either be removed or explain in more detail.
The discussion could be strengthened more by explaining why these results occurred, in addition to the comparison with other studies. What was the underlying cause for initial presentation sixteen years after the injury, and then what changed anatomically or physiologically after the training.

Specific comments
Title: Sixteen year old injury from the title, possibly only long-term follow-up
Abstract: results, it would be better to report the biomechanics in the order that was presented in the methods gate, step activity …
Abstract: results, include the direction of the differences observed, for example increased knee extensor moment rather than saying improvement.

Methods: stiffness can be calculated, rather than inferred, from this data based on joint power and knee flexion.

Methods: is it worth mentioning the statistics, for example sixteen years after injury were the pretest values compared and/or different from the control subjects

Background:" Injuries to the ACL is (are) treated"
Background, line nine: joint stability is used twice in this sentence.
Line fifteen gait, step activity or hop, change too “hopping?” if
Line Eighteen what about knee valgus
Materials and methods: a comparison of the subjects weight height, OA, BMI, and Tegner scores would be better presented in a table for matching purposes.
Materials and methods: it appears from the writing that only ACL group performed the training?
Materials and methods: no strength data was presented in the abstract.
Statistics: consider using Tukey’s HSD (Honestly Significant Difference) or another popular post hoc to reduce Type I error.

Results: injured group line five, by stating the direction of change in these variables space can be saved explaining this and subsequent sentences.
Results, PP. one last line: the comments concerning stiffness should be reserved for the discussion because it was not measured directly.
Discussion, line one: consider rewording “also a long time after injury “
Discussion, PP. one, last line: this argument would be strengthened by including references

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
Discretionary Revisions (which the author can choose to ignore)