Reviewer’s report

Title: Impact of leg lengthening on viscoelastic properties of deep fascia

Version: 1 Date: 25 March 2009

Reviewer: Raffaele De Caro

Reviewer’s report:

Dear Editor,

I have read this paper with interest. The authors are well known for their field of research about fascia. The paper is well structured and covers an interesting area.

I would classify this article as important in its field, but before publication, it needs some modifications:

1. in the “Background”, the Authors write that the deep fascia is continuous with the superficial fascia, but there aren’t Literature supporting this idea. Besides, if it is so, how they sampled the deep fascia for the experimental test, without taking the superficial fascia and without damage the deep fascia?

2. in the “Methods”, the Authors write that uniaxial tensile tests were performed, but they did not specify the direction of the strength. Indeed if the fascia presents anisotropic characteristics, the results could be different if the tissue is stretched along the limb axis or in the orthogonal direction. Eventually, the Authors could evaluate also the paper: Stecco et al, Surg Radiol Anat, 2009

3. in the “Results”, the Authors have to better describe the curves of figures 4 and 5, analyzing the comparison of strain at rupture and the ultimate tension strength according to the Statistical analysis described in the Methods.

4. In the “Discussion”, the Authors affirm that the deep fascia consisted of three layers, but it is no clear what researches support this idea. Besides, if the fascia is formed by three layers, how the collagen fibres are distributed inside each layer? And how each layer relates with the adjacent ones?

5. In the “Discussion”, the differences among the different experimental groups have to be highlight, with particular references to the statistical findings.

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:
I declare that I have no competing interests