Reviewer's report

Title: Association between synovial fluid proinflammatory cytokines and radiographic grading and pain-related scores in 47 consecutive patients with osteoarthritis of the knee

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Reviewer: Joana Lopes

Reviewer's report:

Major Compulsory Revisions
- It is not clearly stated what is the hypothesis of this study
- In the methods section is not described if the authors centrifuge the synovial fluid prior use
- In table 1, why do the authors think is necessary to give information about the total mean age of the patients? The KL grading score should also be shown in frequencies to compare between the classes. How about the information about disease duration and WOMAC score?
- In the paper the authors always compare the cytokine levels between KL and WOMAC grades but in the table 1 they separate the patients according to gender. It does not make any sense to me not to have information about these subpopulations.
- I could not understand the rationelle for the correlation between IL-6 an TNFa. What do the authors hope to accomplish?

Minor Essential Revisions
- What statistical program was used for calculation of the statistical data?
- In pannel A, when the authors say that TNFa showed no significant correlation they probably want to say that there are no statistical difference between groups. they also say that there is a tendency, however I do not believe that this is the case. In the figure legend they should also mention what happens in group C.
- In the Figure 3 legend, the caption is Figure 2 by mistake

Discretionary Revisions
- I believe that it should be interesting to access the serum levels of IL-6, TNF and NGF to compare both with the synovial fluid findings and the scores.
- In the introduction section, the role of IL-6 and TNFa in the pathogenesis of OA should be clarified.

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests: 
I declare that I have no competing interests