Reviewer's report

Title: Knee arthroscopy and exercise versus exercise only for chronic patellofemoral pain syndrome. A randomized controlled trial.

Version: 2 Date: 6 September 2007

Reviewer: Ewa M Roos

Reviewer's report:

General

I find that the text has improved in clarity and figure and tables are much easier to follow. The additions of the exercise program and the outcome score are most helpful. I do however have some comments on aspects which I think can be further improved.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

P3, P2, L7. Surgical interventions…. It is not logical that you 1) in the intro state that surgical interventions should be based on diagnostic findings 2) in the methods state that patients with meniscal symptoms were excluded 3) have performed meniscectomy in included subjects. I am well aware of the clinical reality and reasoning behind this and it might make sense for an orthopedic surgeon, but it does not make sense in a scientific trial and to a scientist. You have improved the understanding by separately giving data for these patients in the results section but still, I suggest you discuss why you did perform meniscectomies in subjects without symptoms thereof.

P5, P3, L2. I find it hard to believe that the study coordinator did not have any expectations concerning the results. This statement needs to be modified!

The Kujala score. Thank you for providing the Kujala score. This score seem to be developed to reflect the surgeon’s perspective of what is important to patients with PFPS (which is fine, but distinctly different from instruments developed to reflect the patient’s opinion). However, my guess is also that the score was developed to be observer administered (as opposed to patient administered). One example is items 11-13 (patellar movement, atrophy and flexion deficiency) which are not easy concepts for patients. You state that the Kujala score reflects knee function. This statement has to be modified since the included items reflect outcomes on all ICF levels including some of doubtful relevance to patients perception of knee function.

Crossley consider an improvement of 2 points on the Kujala score as clinically significant. In your data analysis section you calculate your sample size based on a 10 point difference in improvement between groups. If I have understood correctly, this means that you do not have power to study what is considered to
be the clinically minimal important difference for the Kujala score? In comparison with other similar outcome measures 2 points seem to be a very small difference. This has to be sorted out.

P8, P3. Unless you have a scientific reason to determine the cut-off for moderate improvement this whole paragraph should be deleted. If you have a scientific reason, please describe and give reference.

-------------------------------------------------------------------------------

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

P4, P2, L3. Delete “conservatively”.

P4, P3, L4. The approximate duration of each visit was 30 minutes. How long time did the exercise program take? Please add this info. Regarding the compliance I guess that it was a dichotomous answer, yes/no on a daily basis, not indicating the time spent exercising? Without this info and without objective measures of muscle strength it is difficult to estimate the real compliance with exercise.

P5, P2, last line. The one patient that had a delayed start of the exercise program, did she still exercise for the same amount of time or did she stop at the same week after arthroscopy as the other? For how many weeks was the start delayed?

P7, P4, L1. Substitute “during” with “after the exercise intervention and prior to the 9 month follow up” to more correctly reflect the info given in the figure.

Figure 1. The person with delayed start of exercise in the arthroscopy group seems to have started at three weeks (n=27)? If this person started exercising later than at three weeks, it should be given in figure when this person started.

Table 2. Please check your unit for BMI (kg/cm2).

Table 4. Please omit percentages for number of arthroscopy findings. Give numbers only.

-------------------------------------------------------------------------------

Discretionary Revisions (which the author can choose to ignore)

Which journal?: Appropriate or potentially appropriate for BMC Medicine: an article of outstanding merit and interest in its field

What next?: Accept for publication in BMC Medicine after minor essential revisions

Quality of written English: Needs some language corrections before being published
Statistical review: No

Declaration of competing interests:

‘I declare that I have no competing interests’