

CAHE JC Critically Appraised Article Summary

Journal Club criteria

Date of submission	Pilot 2007
Journal Club location	Lyell McEwin Hospital
JC Facilitator	Matt Sutton

Clinical Scenario

Is physiotherapy effective in improving return to function/work post knee arthroscopy?

Review Question/PICO/PACO

- P** Arthroscopy
- I** Physiotherapy
- C** No physiotherapy
- O** Return to function/work

Article/Paper

Goodwin PC, Morrissey MC, Omar RZ, Brown M, Southall K, Thomas B McAuliffe. Effectiveness of Supervised Physical Therapy in the Early Period After Arthroscopic Partial Meniscectomy. *Physical Therapy*; 2003;83(6):520

Article Methodology:	Randomised Controlled Trial
Returned JC on:	Pilot 2007
By CAHE staff member:	Matt Sutton

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Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p>Population 18 and 60 years of age and underwent an uncomplicated arthroscopic partial meniscectomy</p> <p>Intervention Physical therapy from a standardized protocol 3 times a week for 6 weeks versus no physical therapy</p> <p>Outcomes Strength, ROM, QOL, knee function, time to return to work</p>
2	✓			As the study was comparing two different treatment modal same population, a RCT is the most desirable design to use. Is it worth continuing? YES
3		✓		<p>Allocation was stratified according to recruitment centre. This ensures all centres recruits are allocated evenly to intervention and control. This reduces the chances of bias due to variables associated with comparing factors between centres, such as surgeon skill/experience. Block randomization was used to ensure even numbers in both treatment arms.</p> <p>The allocation method was not stated, nor was whether allocation was concealed.</p>
4			✓	The assessors were blinded, which are the most important group to be blinded. It is unrealistic to blind either the therapists or the participants.
5			✓	Of the original sample size of 100, 16 dropped out prior to the end point. Of these, only one did not receive any intervention. In order for a thorough intention to treat analysis to be performed, the 15 participants who received the intervention but were not followed up should have been included in the analysis. It appears that this is not the case, thus reducing the quality of the results.
6	✓			All outcomes measures were shown to be reliable and valid. All measures were taken at the same time intervals by one of 2 assessors.



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Ques No.	Yes	Can't Tell	No	Comments
7			✓	<p>A power calculation was carried out and the total required was estimated to be 152, however, the study was ceased due to "ethical reasons" prior to this number being obtained. Consequently the study did not have sufficient power to minimise the results being due to chance.</p> <p>It is also worth noting the reasons for ceasing the study were somewhat dubious. The reason given was that if the intervention was effective then everyone should receive it, or conversely if it is ineffective it is a waste of time and money. This issue should have been addressed prior to the study commencement as part of ethics approval. The study is then meant to be carried out in full in order to determine the merits of providing or withholding it.</p>
8				<p>Results are presented as means, differences in means, p value and confidence intervals. None of the outcomes were statistically significant.</p> <p>Bottom line: There appears to be no effect from an intensive physiotherapy treatment post arthroscopic menisectomy in improving ROM, strength, QOL, knee function and time to return to work.</p>
9				<p>The results appear to be quite conclusive, with large p values and generally narrow confidence intervals around zero.</p>
10		✓		<p>Whilst the method of sampling was seemingly appropriate, group allocation was not clear (as outlined previously), and the sample was highly over-representative of male subjects. Whether this represents the demographic profile of patients undergoing knee arthroscopy in other settings is uncertain</p>