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Physiotherapy After Knee Arthroscopy: A Rapid Review

Health Quality Ontario

August 2014

Evidence Development and Standards Branch at Health Quality Ontario

Physiotherapy After Knee Arthroscopy: A Rapid Review. August 2014; pp. 1–22

Suggested Citation

This report should be cited as follows:

Health Quality Ontario. Physiotherapy after knee arthroscopy: a rapid review. Toronto: Health Quality Ontario; August 2014; 22 p. Available from: http://www.hqontario.ca/evidence/evidence-process/episodes-of-care#knee-arthroscopy.

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Conflict of Interest Statement

All reports prepared by the Evidence Development and Standards branch at Health Quality Ontario are impartial. There are no competing interests or conflicts of interest to declare.

Rapid Review Methodology

Rapid reviews are completed in 2–4-week time frames. Clinical questions are developed by the Evidence Development and Standards branch at Health Quality Ontario, in consultation with experts, end users, and/or applicants in the topic area. A systematic literature search is then conducted to identify relevant systematic reviews, health technology assessments, and meta-analyses. The methods prioritize systematic reviews, which, if found, are rated by AMSTAR to determine the methodological quality of the review. If the systematic review has evaluated the included primary studies using the GRADE Working Group criteria (http://www.gradeworkinggroup.org/index.htm), the results are reported and the rapid review process is complete. If the systematic review has not evaluated the primary studies using GRADE, the primary studies in the systematic review are retrieved and the GRADE criteria are applied to 2 outcomes. If no systematic review is found, then RCTs or observational studies are included, and their risk of bias is assessed. All rapid reviews are developed and finalized in consultation with experts.

About Health Quality Ontario

Health Quality Ontario is an arms-length agency of the Ontario government. It is a partner and leader in transforming Ontario's health care system so that it can deliver a better experience of care, better outcomes for Ontarians, and better value for money.

Health Quality Ontario strives to promote health care that is supported by the best available scientific evidence. The Evidence Development and Standards branch works with expert advisory panels, clinical experts, scientific collaborators, and field evaluation partners to conduct evidence-based reviews that evaluate the effectiveness and cost-effectiveness of health interventions in Ontario.

Based on the evidence provided by Evidence Development and Standards and its partners, the Ontario Health Technology Advisory Committee—a standing advisory subcommittee of the Health Quality Ontario Board—makes recommendations about the uptake, diffusion, distribution, or removal of health interventions to Ontario's Ministry of Health and Long-Term Care, clinicians, health system leaders, and policy-makers.

Health Quality Ontario's research is published as part of the *Ontario Health Technology Assessment Series,* which is indexed in MEDLINE/PubMed, Excerpta Medica/Embase, and the Centre for Reviews and Dissemination database. Corresponding Ontario Health Technology Advisory Committee recommendations and other associated reports are also published on the Health Quality Ontario website. Visit http://www.hqontario.ca for more information.

About Health Quality Ontario Publications

To conduct its rapid reviews, Evidence Development and Standards and its research partners review the available scientific literature, making every effort to consider all relevant national and international research; collaborate with partners across relevant government branches; consult with expert advisory panels, clinical and other external experts, and developers of health technologies; and solicit any necessary supplemental information.

In addition, Evidence Development and Standards collects and analyzes information about how a health intervention fits within current practice and existing treatment alternatives. Details about the diffusion of the intervention into current health care practices in Ontario add an important dimension to the review. Information concerning the health benefits, economic and human resources, and ethical, regulatory, social, and legal issues relating to the intervention may be included to assist in making timely and relevant decisions to optimize patient outcomes.

Disclaimer

This rapid review is the work of the Evidence Development and Standards branch at Health Quality Ontario, and is developed from analysis, interpretation, and comparison of published scientific research. It also incorporates, when available, Ontario data and information provided by experts. As this is a rapid review, it may not reflect all the available scientific research and is not intended as an exhaustive analysis. Health Quality Ontario assumes no responsibility for omissions or incomplete analysis resulting from its rapid reviews. In addition, it is possible that other relevant scientific findings may have been reported since completion of the review. This report is current as of the date of the literature search specified in the Research Methods section. Health Quality Ontario makes no representation that the literature search captured every publication that was or could be applicable to the subject matter of the report. This rapid review may be superseded by an updated publication on the same topic. Please check the Health Quality Ontario website for a list of all publications: http://www.hqontario.ca/evidence/publications-and-ohtac-recommendations.

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List of Abbreviations

AMSTAR	Assessment of Multiple Systematic Reviews
CI	Confidence interval(s)
GRADE	Grading of Recommendations Assessment, Development, and Evaluation
HQO	Health Quality Ontario
OHTAC	Ontario Health Technology Advisory Committee
RCT	Randomized controlled trial

Background

As legislated in Ontario's *Excellent Care for All Act*, Health Quality Ontario's mandate includes the provision of objective, evidence-informed advice about health care funding mechanisms, incentives, and opportunities to improve quality and efficiency in the health care system. As part of its Quality-Based Procedures (QBP) initiative, Health Quality Ontario works with multidisciplinary expert panels (composed of leading clinicians, scientists, and administrators) to develop evidence-based practice recommendations and define episodes of care for selected disease areas or procedures. Health Quality Ontario's recommendations are intended to inform the Ministry of Health and Long-Term Care's Health System Funding Strategy.

For more information on Health Quality Ontario's Quality-Based Procedures initiative, visit www.hqontario.ca.

Objective of Analysis

The objective of this analysis is to examine the effectiveness of physiotherapy after knee arthroscopy on patient pain and return to activity.

Clinical Need and Target Population

International guidelines are inconsistent with respect to whether patients should receive physiotherapy when recovering from a knee arthroscopy procedure. (1-3) There is uncertainty about the effectiveness of physiotherapy for these patients.

Rapid Review

Research Question

What is the effectiveness of physiotherapy in comparison to no physiotherapy after knee arthroscopy?

Research Methods

Literature Search

Search Strategy

A literature search was performed on January 21, 2014, using Ovid MEDLINE, Ovid MEDLINE In-Process and Other Non-Indexed Citations, and EBM Reviews for studies published from January 1, 2008 to January 21, 2014. (Appendix 1 provides details of the search strategies.) Abstracts were reviewed by a single reviewer and, for those studies meeting the eligibility criteria, full-text articles were obtained. Reference lists were also examined for any additional relevant studies not identified through the search.

Inclusion Criteria

- English-language full-text publications
- published between January 1, 2008 and January 21, 2014
- systematic reviews (SRs) and meta-analyses
- knee arthroscopy
- physiotherapy compared with no physiotherapy (or usual care)

Exclusion Criteria

- studies where results on outcomes of interest cannot be abstracted

Outcomes of Interest

- pain
- return to activity, work, or sport

Expert Panel

In December 2013, an Expert Advisory Panel for Patients Undergoing Knee Arthroscopic Surgery was struck. Members of the panel included physicians, personnel from the Ministry of Health and Long-Term Care, health care administrators, and allied health professionals.

The role of the expert advisory panel was to provide advice on primary patient groupings; to review the evidence, guidance, and publications related to defined patient populations; to identify and prioritize interventions for review; and to advise on the development of a care pathway model. The role of panel members was to provide advice on the scope of the project, the methods used, and the findings. However,

the statements, conclusions, and views expressed in this report do not necessarily represent the views of the expert panel members.

Quality of Evidence

The Assessment of Multiple Systematic Reviews (AMSTAR) measurement tool was used to assess the methodological quality of systematic reviews.(4) Primary studies were abstracted from the selected reviews and referenced for quality assessment of the body of the evidence for the outcomes of interest.

The quality of the body of evidence for each outcome was examined according to the Grading of Recommendations Assessment, Development and Evaluation (GRADE) Working Group criteria. (5) The overall quality was determined to be very low, low, moderate, or high via a step-wise, structural method.

Study design was the first consideration; the starting assumption was that randomized controlled trials (RCTs) are high quality, whereas observational studies are low quality.

Five additional factors—risk of bias, inconsistency, indirectness, imprecision, and publication bias—were then taken into account. Limitations in these areas resulted in downgrading the quality of evidence. Finally, 3 main factors that can raise the quality of evidence were considered: large magnitude of effect, dose-response gradient, and accounting for all residual confounding factors. (5) For more detailed information, please refer to the latest series of GRADE articles. (5)

As stated by the GRADE Working Group, the final quality score can be interpreted using the following definitions:

High	Very confident that the true effect lies close to the estimate of the effect;
Moderate	Moderately confident in the effect estimate—the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different;
Low	Confidence in the effect estimate is limited—the true effect could be substantially different from the estimate of the effect;
Very Low	Very little confidence in the effect estimate—the true effect is likely to be substantially different from the estimate of effect.

Results of Rapid Review

The database search yielded 69 citations published between January 1, 2008 and January 22, 2014 (with duplicates removed). Articles were excluded based on information in the title and abstract. The full texts of potentially relevant articles were obtained for further assessment.

Two systematic reviews met the inclusion criteria. The reference lists of the included studies and health technology assessment websites were hand-searched to identify other relevant studies, and no additional citations were included. The systematic reviews are summarized in Table 1.

Table 1: Summary of Included Systematic Reviews

Author, Year	Search Dates	Study Design	Inclusion Criteria	AMSTAR (out of 11)
Coppola and Collins, 2009 (6)	Up to December 2007	RCTs	Patients post-knee surgery where trials compared physical therapy with unsupervised home exercise programs	7
Dias et al, 2013 (7)	Up to March 2013	RCTs	Patients undergoing arthroscopic partial meniscectomy	8

Quality Assessment of Reviews

To see the factors considered in determining the AMSTAR scores, see Appendix 2, Table A1.

Given that the systematic review by Coppola and Collins (6) had a lower AMSTAR score and that all the RCTs it identified were incorporated into the more recently published Dias et al (7) paper, the Coppola and Collins paper was at this point excluded; this rapid review went on to examine the Dias et al paper.

Summary of Included Studies

The objective of the included systematic review by Dias et al (7) was to examine the impact of post-operative physical therapy interventions among patients who had undergone arthroscopic partial meniscectomy. No literature was identified which examined the effectiveness of physical therapy among patients recovering from arthroscopic knee ligament surgery such as anterior cruciate ligament (ACL) reconstruction.

To reiterate, all RCTs identified by Coppola and Collins (6) were incorporated into the Dias et al (7) review, i.e., despite the older study's broader range ("patients post-knee surgery"), it too found no literature on physiotherapy's impact after arthroscopic knee ligament surgery such as ACL reconstruction. In theory, this rapid review is missing any such literature which may have appeared since 2007, but the Expert Advisory Panel determined that this was not an issue of concern. To accurately reflect the scope undertaken by this rapid review, the broader term "knee arthroscopy" is maintained throughout.

Dias et al sub-grouped their research into 7 categories, including evaluations of the intensity, location, and type of physiotherapy intervention. (7) They identified 8 RCTs that examined physiotherapy versus no physiotherapy among patients who had received knee arthroscopy. (7) Of these studies, 1 (8) was excluded from this rapid review as it did not report any of the outcomes of interest for our purposes. The other 7 are described in Table 2.

Table 2: RCTs Assessing Physiotherapy vs. No Physiotherapy After Knee Arthroscopy

Author, Year	Sample Size (Intervention/ Control)	Physiotherapy (intervention)	No Physiotherapy (control)
Birch et al, 1993 (9)	21/47 (an additional 52 were in a third study group which received NSAIDs)	PT + home exercise	Home exercise
Goodwin et al, 2003 (10)	45/41	PT + home exercise	Home exercise
Jokl et al,1989 (11)	15/15	PT	Home exercise
Kelln et al, 2009 (12)	16/15	PT with stationary bike + home exercise	Home exercise
Kirnap et al, 2005 (13)	20/20	PT with EMG-B + home exercise	Home exercise
Moffet et al, 1994 (14)	15/16	PT + home exercise	Home exercise
Vervest et al,1999 (15)	10/10	PT according to a dynamic protocol + home exercise	Home exercise

Abbreviations: EMG-B, electromyographic biofeedback; NSAID, non-steroidal anti-inflammatory drug; PT, physiotherapy; RCT, randomized controlled trial.

Results for Outcomes of Interest

The selection of outcomes reported by the 7 RCTs is inconsistent, and none of them clearly report both of the outcomes of interest of this rapid review (pain, and return to activity). However, the systematic review by Dias et al (7) does report a number of findings from a variety of measurement scores and tests which include evaluations of pain and/or return to activity. Table 3 summarizes the results as reported in Dias et al (7) for all measures which included pain or return to activity.

Table 3: Results of Measures Which Include Pain and/or Return to Activity for Patients who did/did not Receive Physiotherapy After Knee Arthroscopy

Author, Year	Sample Size (Intervention/ Control)	Treatment Period	Follow-up Period	Results for the Intervention Groups (Physiotherapy) Mean score ± SD	Results for the Control Groups (No Physiotherapy) Mean score ± SD
Birch et al, 1993 (9)	21/47	6 weeks	6 weeks	**Noyes score** pre: 108.4 ± 19.2 6 weeks: 141.1 ± 6.6	**Noyes score** pre: 114.5 ± 19.9 6 weeks: 144.8 ± 8.6
Goodwin et al, 2003 (10)	45/41	6 weeks	6 weeks	**Hughston Clinic Questionnaire** pre: 58.5 ± 14.8 6 weeks: 27.7 ± 18.4 **SF-36 score** pre: 0.68 ± 0.12 6 weeks: 0.75 ± 0.12 **EQ-5D score** pre: 0.56 ± 0.22 6 weeks: 0.75 ± 0.21 **N days taken to return to work after surgery** pre: n/a 6 weeks: 1.5 ± 1.8	**Hughston Clinic Questionnaire** pre: 59.1 ± 17.3 6 weeks: 24.8 ± 16.7 **SF-36 score** pre: 0.69 ± 0.10 6 weeks: 0.76 ± 0.10 **EQ-5D score** pre: 0.54 ± 0.20 6 weeks: 0.81 ± 0.12 **N days taken to return to work after surgery** pre: n/a 6 weeks: 1.4 ± 1.5
Jokl et al,1989 (16)	15/15	4 weeks	8 weeks	**Degrees of knee pain** 2 weeks: 0 severe, 2 moderate, 10 mild, 2 none 8 weeks: 0 severe, 1 moderate, 4 mild, 10 none	**Degrees of knee pain** 2 weeks: 1 severe, 4 moderate, 4 mild, 4 none 8 weeks: 0 severe, 0 moderate, 3 mild, 11 none
Kelln et al, 2009 (12)	16/15	2 weeks	12 weeks	**IKDC for group differences** *Cohen's d (95% Confidence Interval)* pre: 0.33 (−6.56 to 7.97) 12 weeks: 0.47 (−8.92 to 9.45)	
Kirnap et al, 2005 (13)	20/20	2 weeks	6 weeks	**Lysholm Questionnaire** pre: 70.3 ± 14.3 6 weeks: 95.4 ± 3.7[a]	**Lysholm Questionnaire** pre: 69.1 ± 12.9 6 weeks: 79.6 ± 10.1[a]
Moffet et al, 1994 (14)	15/16	3 weeks	6 months	**Lysholm Questionnaire** pre: 70 ± 19 6 months: 91 ± 14	**Lysholm Questionnaire** pre: 74 ± 23 6 months: 89 ± 16
Vervest et al,1999 (15)	10/10	3 weeks	4 weeks	**Tegner score** 1 week: 1.0 ± 10.8 4 weeks: 2.8 ± 1.8 **Lysholm Questionnaire** 1 week: 66.4 ± 22.6 4 weeks: 88.7 ± 13.9 **Sports Activity Rating Scale** 1 week: 30.0 ± 10.5 4 weeks: 48.3 ± 24.1[b] **Pain** 1 week: 26.0 ± 27.3 4 weeks: 6.6 ± 7.3	**Tegner score** 1 week: 0.6 ± 0.7 4 weeks: 2.1 ± 1.4 **Lysholm Questionnaire** 1 week: 65.1 ± 21.3 4 weeks: 79.4 ± 18.8 **Sports Activity Rating Scale** 1 week: 28.0 ± 10.3 4 weeks: 28.0 ± 14.0[b] **Pain** 1 week: 14.3 ± 16.6 4 weeks: 14.2 ± 26.0

Abbreviations: EQ-5D, Euroqol-5 dimension; IKDC, International Knee Documentation Committee; N, number; SD, standard deviation; SF-36, 36-item short form health survey.

[a] Statistically significant difference between study groups, the results of student t-test had $P < 0.001$.

[b] Statistically significant difference between study groups, the results of student t-test had $P = 0.04$.

Dias et al (7) conducted a meta-analysis of the Lysholm Questionnaire as it was reported in the following three studies: Kirnap et al (13); Moffet et al (14); and Vervest et al. (15) As shown in Table 4, this meta-analysis found a statistically significant impact in favour of the physiotherapy group when using a random effects model ($I^2 = 60\%$). However, there is very low quality of evidence for the Lysholm Questionnaire as a tool for measuring the effectiveness of physiotherapy versus no physiotherapy for patients who have undergone knee arthroscopy. Details of the GRADE quality estimate are available in Appendix 2, Table A2.

Table 4: Effect Estimate for Meta-Analysis of Lysholm Questionnaire Results for Patients who had/had not Received Physiotherapy After Knee Arthroscopy

Author, Year	Intervention Group Sample Size/ Control Group Sample Size	Mean Difference of Lysholm Questionnaire Scores (95% CI)	Summary Effect Estimate Mean Difference[a] (95% CI)
Kirnap et al, 2005 (13)	20/20	15.8 (11.09 to 20.51)	10.35 (1.33 to 19.36)
Moffet et al, 1994 (14)	15/16	2.00 (−9.70 to 13.70)	
Vervest et al,1999 (15)	10/10	9.30 (−5.19 to 23.79)	

Abbreviation: CI, confidence interval.
[a] Dias et al (7) calculated mean difference with instrumental variable estimation.

Overall, 13 outcomes reported by 7 RCTs were included in this rapid review; and in 11 of the outcomes across 5 of the RCTs (9;10;12;14;17) no statistically significant difference was seen. The Kirnap et al (13) study found a statistically significant difference between study groups for the Lysholm Questionnaire (student t-test: $P < 0.001$), and the Vervest et al (15) study found a statistically significant difference for the Sports Activity Rating Scale (student t-test: $P = 0.04$), both in favour of the physiotherapy group versus the control group. These two studies, unlike the other 5, appear to offer unique physiotherapy intervention protocols, which include electromyographic biofeedback (13) and dynamic protocols. (15) However, it cannot be stated whether these differences in physiotherapy protocols are responsible for the observed statistically significant impact, given the limited information available in the Dias et al (7) systematic review.

Due to inconsistency in the outcomes reported among the 7 RCTs, only one of the 5 GRADE components—risk of bias—could be assessed for the body of literature as a whole. The risk of bias assessment identified significant limitations, with various dimensions, as reported in Appendix 2, Table A3.

Conclusions

- Based on a systematic review including studies with serious limitations to risk of bias, the evidence does not support the effectiveness of physiotherapy versus home exercise alone among patients who have received arthroscopic partial meniscectomy.
- No literature was identified which examined the effectiveness of physiotherapy among patients who have received arthroscopic knee ligament surgery.

Acknowledgements

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Winnie Doyle	St Joseph's Healthcare, Hamilton	VP President Patient Services, Chief Nursing Executive

Appendices

Appendix 1: Literature Search Strategies

Search date: January 21, 2014
Databases searched: OVID MEDLINE, MEDLINE In-Process and Other Non-Indexed Citations, All EBM Databases (see below)
Limits: 2008-current; English
Filters: health technology assessments, systematic reviews, and meta-analyses

Databases: Database: EBM Reviews - Cochrane Database of Systematic Reviews <2005 to December 2013>, EBM Reviews - ACP Journal Club <1991 to December 2013>, EBM Reviews - Database of Abstracts of Reviews of Effects <4th Quarter 2013>, EBM Reviews - Cochrane Central Register of Controlled Trials <December 2013>, EBM Reviews - Cochrane Methodology Register <3rd Quarter 2012>, EBM Reviews - Health Technology Assessment <4th Quarter 2013>, EBM Reviews - NHS Economic Evaluation Database <4th Quarter 2013>, Ovid MEDLINE(R) <1946 to January Week 2 2014>, Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations <January 20, 2014>

Search Strategy:

#	Searches	Results
1	Arthroscopy/	16958
2	exp Knee Joint/ or exp Knee Injuries/	53059
3	and/1-2	6444
4	Anterior Cruciate Ligament/ or Medial Collateral Ligament, Knee/ or Posterior Cruciate Ligament/ or Anterior Cruciate Ligament Reconstruction/	11824
5	(((arthroscop* or reconstruct* or repair* or surg* or orthop*) and (anterior cruciate ligament* or posterior cruciate ligament* or meniscal or menisci or meniscus or menisectom* or semilunar cartilage* or ACL or PCL or MCL)) or (arthroscop* and knee*)).ti,ab.	19515
6	or/3-5	24512
7	exp Rehabilitation/	155843
8	exp Rehabilitation Nursing/	1126
9	exp Rehabilitation Centers/	12242
10	exp "Physical and Rehabilitation Medicine"/	19580
11	exp Physical Therapy Modalities/	132126
12	rehabilitation.fs.	159684
13	(rehabilitat* or movement therap* or physiotherap* or physio-therap* or (physical adj (therap* or train*)) or strength train*).ti,ab.	147158
14	or/7-13	435819
15	Meta Analysis.pt.	43785
16	Meta-Analysis/ or exp Technology Assessment, Biomedical/	52700
17	(meta analy* or metaanaly* or pooled analysis or (systematic* adj2 review*) or published studies or published literature or medline or embase or data synthesis or data extraction or cochrane).ti,ab.	189058
18	((health technolog* or biomedical technolog*) adj2 assess*).ti,ab.	2606
19	or/15-18	205001

20	6 and 14 and 19	105
21	limit 20 to yr="2008 -Current" [Limit not valid in DARE; records were retained]	72
22	limit 21 to english language [Limit not valid in CDSR,ACP Journal Club,DARE,CCTR,CLCMR; records were retained]	70
23	remove duplicates from 22	69

Appendix 2: Evidence Quality Assessment

Table A1: AMSTAR Scores of Included Systematic Reviews

Author, Year	AMSTAR Score[a]	(1) Provided Study Design	(2) Duplicate Study Selection	(3) Broad Literature Search	(4) Considered Status of Publication	(5) Listed Excluded Studies	(6) Provided Characteristics of Studies	(7) Assessed Scientific Quality	(8) Considered Quality in Report	(9) Methods to Combine Appropriate	(10) Assessed Publication Bias	(11) Stated Conflict of Interest
Coppola and Collins, 2009 (6)	7	✓	✓	✓	X[b]	X[b]	✓	✓	✓	✓	X[b]	X[b]
Dias et al, 2013 (7)	8	✓	✓	✓	X[b]	✓	✓	✓	✓	✓	X[b]	X[b]

Abbreviations: AMSTAR, Assessment of Multiple Systematic Reviews.
[a]Maximum possible score is 11. Details of AMSTAR score are described in Shea et al. (4)
[b] indicates a response of no.

Table A2: GRADE Evidence Profile for Comparison of Physiotherapy vs. No Physiotherapy After Knee Arthroscopy

No. of Studies by Design	Risk of Bias[a]	Inconsistency	Indirectness	Imprecision	Publication Bias	Upgrade Considerations	Quality
Pain and/or Return to Activity: Lysholm Questionnaire							
3 RCTs	Very serious limitations (−2)	No serious limitations	Serious limitations (−1)[b]	Serious limitations (−1)[c]	Undetected	None	⊕ Very low

Abbreviations: GRADE, Grading of Recommendations Assessment, Development and Evaluation; No., number; RCT, randomized controlled trial.
[a]Details on risk of bias are described in Table A3.
[b]The Lysholm Questionnaire has not been demonstrated to be the most appropriate or validated measure for pain or return to activity.
[c]There is a wide confidence interval around the summary effect estimate.

Table A3: Risk of Bias Among RCTs for the Comparison of Physiotherapy Versus No Physiotherapy After Knee Arthroscopy

Author, Year	Allocation Concealment	Blinding	Complete Accounting of Patients and Outcome Events	Selective Reporting Bias	Other Limitations
Birch et al, 1993 (9)	Limitations[a]	Limitations[b,c]	No limitations	No limitations	No limitations
Goodwin et al, 2003 (10)	Limitations[a]	Limitations[b]	Limitations[d]	No limitations	No limitations
Jokl et al,1989 (18)	Limitations[a]	Limitations[b]	No limitations	No limitations	No limitations
Kelln et al, 2009 (12)	Limitations[a]	Limitations[b]	No limitations[e]	No limitations	No limitations
Kirnap et al, 2005 (13)	Limitations[a]	Limitations[b]	No limitations	No limitations	No limitations[f]
Moffet et al, 1994 (14)	Limitations[a]	Limitations[b,c]	Limitations[g]	No limitations	No limitations[f]
Vervest et al,1999 (15)	Limitations[a]	Limitations[b,c]	No limitations	No limitations	No limitations

Abbreviations: RCT, randomized controlled trial.

[a] Treatment administrator could not be blinded to study arm.

[b] Patients could not be blinded due to the nature of the intervention; the outcome of interest is subjective and there is therefore the potential for bias.

[c] Blind assessor was used; however, the outcomes of interest of this rapid review are largely patient reported.

[d] Some loss to follow-up which was not accounted for with intention-to-treat (ITT) analyses.

[e] One patient in each study group dropped out before the end of the follow-up period; however, ITT analysis found there to be negligible impact.

[f] Study reported patients being randomized; however, method of randomization was not stated.

[g] One patient failed to attend all treatment in the intervention arm of the study.

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