research NEWS
Centre for Allied Health Evidence

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The Joanna Briggs Institute

CAHE JC Critically Appraised Article Summary

Journal Club Details

Date of submission July 2008

Journal Club location Masonic Homes

JC Facilitator Sally Cropper

Clinical Scenario

Which exercises are most effective in reducing pain and improving function in patients with rotator cuff tear?

Review Question/PICO/PACO

P: Adults over 50 years old with rotator cuff tear

I: Exercise program for rotator cuff

C: No exercise

O: Pain and Function

Article/Paper

Ainsworth R, Lewis JS. *Br J Sports Med* 2007; 41: 200-210.
Exercise therapy for the conservative management of full thickness tears of the rotator cuff: A Systematic Review

Article Methodology: Systematic review

Returned JC on: 9 July 2008

By CAHE staff member: Lucylynn Lizarondo

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Ques No.	Yes	Can't Tell	No	Comments
1	✓			The review asked a clearly focused question: Population: Skeletally mature human adults with a clinical diagnosis of full thickness or massive or inoperable rotator cuff tears Intervention: Exercise Outcomes: Shoulder impairment, shoulder disability, pain, patient-perceived effect/benefit, impact on quality of life
2	✓			The authors stated that studies had to be randomised controlled trials and observational studies written in any language, which are appropriate research designs to address the review question. Is it worth continuing? YES
3	✓			A wide range of databases which include MEDLINE, AMED, PEDro, EMBASE, Cochrane Library, and CINAHL were searched. This was followed by hand searching and reviewing of reference lists. The list if search terms used was extensive enough to identify all relevant articles. There was no language restriction set.
4	✓			Methodological quality of RCT's was assessed using the PEDro scale while observational studies were evaluated using guidance from the NHS Centre for Reviews and Dissemination. Each article was reviewed independently by two assessors and any disagreements were resolved by consensus.
5				The results from each study were clearly displayed using tables and narrative summaries. Heterogeneity of outcome measurements, types of exercises, follow-up times and environment for training did not allow pooling of results in meta-analysis.
6				The results were presented using narrative summary. Whilst there appears to be a definite benefit in including exercise in the treatment of patients with rotator cuff tear, it is not possible to determine the size of that effect with any certainty. Bottom-line result: Results suggest exercise, when performed as part of a treatment programme, has a beneficial effect for patients with full thickness rotator cuff tears.
7				This review did not find any randomised controlled trial which could have increased the strength of evidence presented by the authors. Whilst observational studies can provide some limited evidence, the size of the effect cannot be determined.

For more information on the CAHE Journal Clubs contact:
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Ques No.	Yes	Can't Tell	No	Comments
8		✓		The extent to which the results may be applied to the local setting may be limited as the details of the intervention relating to the type of exercise, duration, intensity, frequency, repetitions and progression varied considerably in the included studies. Moreover, only few articles described the exercises in detail to allow repetition of the same programs on other patients.
9	✓			All important outcomes have been considered – pain, impairment and disability, patient-perceived effect and impact on quality of life.
10		✓		Whilst the intervention used in the included papers have not been reported to cause harm to patients, benefits of exercise as conveyed in this systematic review should not lead to practice or policy change as they have been based on observational studies. Observational studies provide evidence of lower scientific merit because of issues related to validity and ability to generalise findings to inform clinical practice.

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