

Roberta L. Ainsworth - Publications

Exercise therapy for the conservative management of full thickness tears of the rotator cuff: a systematic review.

Ainsworth R, Lewis J.S. (2007).
Br. J. Sports Med. 41; 200-210

Abstract:

Purpose: To review the evidence for the effectiveness of therapeutic exercise for the treatment of full thickness (including massive and inoperable) tears of the rotator cuff.

Relevance: There is little consensus as to the most effective treatment of full thickness and massive tears of the rotator cuff. There is consensus that the outcome of rotator cuff tendon surgery in the elderly is generally very poor. As such, exercise therapy is usually recommended for this patient group. Although commonly prescribed, the evidence to support this approach is equivocal. The aim of this study was to conduct a systematic review of the literature to determine the efficacy of exercise therapy for the management of full thickness rotator cuff tears.

Methods: A systematic review was conducted to synthesise the available research literature on the effectiveness of exercise therapy for full thickness tears of the rotator cuff.

Data source: Reports up to and including September 2006 were located from MEDLINE, the Cumulative Index to Nursing & Allied Health Literature (CINAHL), AMED, EMBASE, the Cochrane Database of Systematic Reviews and the Physiotherapy Evidence Database (PEDro) using the terms "rotator cuff" and "tear/s" and "exercise" or "physiotherapy" or "physical therapy" or "rehabilitation".

Study selection: Studies were included if they related to full thickness rotator cuff tears and exercise.

Data extraction: Two independent reviewers assessed the methodological quality of the studies. Differences were resolved by consensus.

Analysis/Data synthesis: Ten studies met the inclusion criteria: eight were observational case series and two were single case studies. There were no randomised clinical trials.

Results: Four studies were specific to massive rotator cuff tears. One study had a sub-group with massive cuff tears and five studies were not specific as to the size of the full thickness tear. Due to the heterogeneity of outcome measures used, it was not possible to combine results. In all studies an improvement in outcome scores was reported. Exercise programmes were well documented in five studies.

Conclusions: No randomised controlled trials met the inclusion criteria and the evaluation has been based on observational studies of lower scientific merit. The findings suggest that some evidence exists to support the use of exercise in the management of full thickness rotator cuff tears. There is a definite need for well-planned randomised controlled trials investigating the efficacy of exercise in the management of full thickness and massive rotator cuff tears.