# Specific Question: In patients with arthroscopic cuff repair, does early mobilisation improve pain and functional outcomes?

## Clinical bottom line

No conclusion can be drawn on whether early mobilisation can improve pain and function. However, early passive movement results in small improvements in range of motion (ROM) but this benefit reduces with time and may not be clinically relevant. There is no difference in re-tear rates in those who have early mobilisation. Further large randomised controlled trials are needed.

In the absence of evidence of a clearly superior post-operative regime, it would be helpful to physiotherapists rehabilitating this patient group for a consensus to be reached regarding an acceptable post-operative protocol which promotes good recovery whilst respecting the physiology of tissue healing.

## Why is this important?

Patients can be reassured that there is no evidence of harm for example, re-tear of the rotator cuff from early mobilisation. Further large high quality trials, with outcomes of pain and function, are needed to test the effectiveness of early mobilisation in this patient group, and to better inform clinical practice.

## Inclusion Criteria

**Search ( e.g. 2009-2016)**

| | **Description** |
|---|---|
| **Population and Setting** | Adults who have had arthroscopic rotator cuff repair |
| **Intervention or Exposure (i.e. what is being tested)** | Early (day 3 -14 post operative) mobilisation of Glenohumeral joint<br>Early (day 3-14 post operative) range of motion (ROM) exercises<br>Early (day 3-14 post operative) progressive exercises<br>Early (day 3-14 post operative) strengthening exercises |

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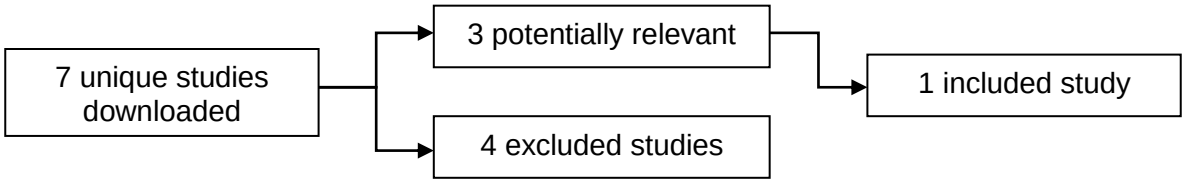
|---|---|
| **Comparison, if any** | Delayed (4-6 week post operative) ROM<br>Delayed (4-6 week post operative) mobilisation<br>Later (after 4-6 weeks post operative) mobilisation<br>Later (after 4-6 week post operative) ROM and strengthening exercises |
| **Outcomes of interest** | Pain, function<br>ROM, delayed function, increased pain, complication rates- including risk and rate of rupture, need for further intervention, frozen shoulder/capsulitis, recurrence of symptoms, return to work/sport, sick leave, daily intake of analgesia, patient satisfaction |
| **Types of studies** | Systematic reviews & Randomised controlled trials (RCT's) only<br>Observational studies if no RCTs |

**Routine Databases Searched**

Clinical Knowledge Summaries, PEDro, BMJ Updates, Clinical Evidence, TRIP, Database,NICE,HTA,Bandolier,The,CochraneLibrary,Medline,Cinahl,Embase,PsycInfo, Professional websites. Joanna Briggs Institute, Web of science, Sports discus and Pub med

## Date of search 24.7.14

## Results

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Date CAT completed: August 2016
Date CAT to be reviewed: August 2018

Musculoskeletal Research Facilitation Group (Cat Group)
Critically appraised topic and clinical bottom line
Date: August 2016

| First Author, year and type of study | Population and setting | Intervention or exposure tested | Study results | Assessment of quality and comments |
|---|---|---|---|---|
| Riboh J 2014 Systematic review | Adults undergoing arthroscopic rotator cuff repair (under 65, small full thickness tears of less than 30mm in one tendon and no co-existing pathology) | Immobilisation post operatively for 4-6 weeks, versus early mobilisation | Early passive movement (EPM) resulted in improved shoulder flexion at 3,6 and 12 months. External rotation (ER) superior in EPM group at 3 months post op only. | Small number of RCTs available for the review. Differences were very small and may not be clinically meaningful. No data on pain, functional outcome or stiffness. |

## Summary

There was no difference in range of movement or re-tear rates between the two treatment strategies (early passive movement and immobilisation for 4-6 weeks) following arthroscopic rotator cuff repair.

No data on pain, functional outcome or stiffness were collected. The sample included was quite specific (under 65, small rotator cuff full thickness tears of less than 30 mm in one tendon and no co existing pathology) therefore generalizability of the findings to the broader groups of patients undergoing arthroscopic rotator cuff repair may be limited.

## Implications for Practice/research

Further large RCT's are required to investigate the effect of early mobilisation on pain and function in this patient group.

## What would you tweet? (140 characters)

There is no difference in shoulder range of movement or rotator cuff re-tear rate between early mobilisation or immobilisation after arthroscopic cuff repair.

## References

Riboh JC, Garrigues GE Early passive motion versus immobilisation after arthroscopic rotator cuff repair. Arthroscopy 2014:30:8 997-1005

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