

**Specific Question:**

In adults with Subacromial Impingement Syndrome (SIS) is physiotherapy supervised exercise (ex) more clinically effective than a patient information session or leaflet only?

**Clinical bottom line**

There is high quality evidence to suggest that supervised, progressed and individualized exercises are more effective than a leaflet alone for patients with Subacromial Impingement Syndrome in combination with a steroid injection.

**Why is this important?**

It is not known whether supervised physiotherapy exercise programmes are anymore clinically effective in reducing pain and improving function than an information session or leaflet containing information and exercise. Identification of clinical and cost effective treatments and patient management pathways is essential for evidence based quality care.

**Inclusion Criteria**

	Description	Search terms
<b>Population and Setting</b>	Adults	Adults with subacromial pain/shoulder joint impingement syndrome/subacromial impingement pain
<b>Intervention or Exposure</b>	Supervised exercise	Physiotherapy, physical therapy, exercise, exercise therapy, conservative treatment, rehabilitation/leaflets/self help/ manual therapy
<b>Comparison, if any</b>	Leaflet or patient information session alone	
<b>Outcomes of interest</b>	Pain, function, short/long term, quality of life, patient satisfaction	
<b>Types of studies</b>	SR & RCT's only	

### Routine Databases Searched

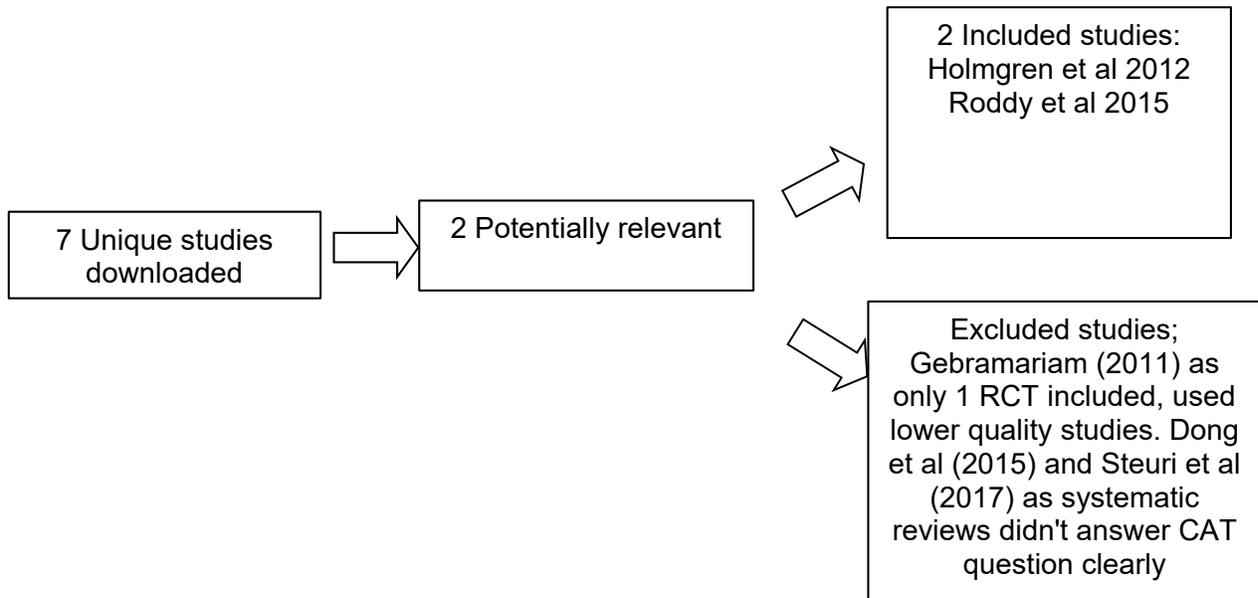
Medline, CINAHL, Pubmed, EMBASE, AMED

### Search criteria

(exp "SHOULDER IMPINGEMENT SYNDROME"/ AND ((leaflet\*).ti,ab OR (handout\*).ti,ab OR ("printed information").ti,ab)) AND (exp "EXERCISE THERAPY"/ OR ("supervised exercises").ti,ab OR exp REHABILITATION/ OR exp "PHYSICAL THERAPY MODALITIES"/ OR exp "MUSCULOSKELETAL MANIPULATIONS"/ OR exp EXERCISE/)"

Date of search- July 2017.

### Results of the search



Getting Evidence into Clinical Practice:  
Musculoskeletal Research Facilitation Group (CAT Group)  
Date: October 2018

Table 1- Detail of included studies

First Author, year and type of study	Population and setting	Intervention or exposure tested	Study results	Assessment of quality and comments
Roddy et al (2015)	<p>Patients with a clinical diagnosis of SIS were included (pain in deltoid insertion area, positive Neers and Hawkins-Kennedy tests, pain on shoulder abduction)</p> <p>Primary Care, in UK</p>	<p>Investigated whether better outcomes are achieved with physiotherapist lead exercise programme, rather than advice &amp; a leaflet; and US-guided subacromial CS injection rather than unguided injection.</p> <p>Physiotherapist lead individualised, supervised and progressed ex 6-8 sessions over a 12-16 week period.</p> <p>Advice and ex leaflet. No supervision or progression.</p>	<p>Physio-lead ex more effective than leaflet alone at 6 &amp; 12 months,</p> <p>Physio-lead ex more effective at reducing pain at 6&amp;12 months, and disability at 6m, but not 12m.</p> <p>At 12 months 3 other outcome measures reflected the SPADI score findings.</p>	<p>RCT 256 patients randomized equally to one of 4 Rx groups, using block randomization- 64 per group.</p> <p>2x2 factorial RCT.</p> <p>Shoulder pain and disability index (SPADI) primary outcome: Long term outcomes and cost effectiveness.</p> <p>Measurements baseline, follow-up 6/52, 6/12, 12/12</p> <p>All patients had an injection</p>
Holmgren et al (2012)	<p>Patients with subacromial impingement syndrome</p> <p>Orthopaedics Swedish University Hospital</p>	<p>Evaluate if specific ex programme improves shoulder function and pain more than an unspecific ex programme.</p> <p>Intervention; 6 strengthening ex, posterior shoulder stretch, manual stretch added when required by physiotherapist &amp; HEP</p> <p>Control: 6 unspecific movement ex for neck and shoulder unloaded &amp; HEP.</p> <p>Both groups seen equally by same physio over 12/52 period, control group ex's not progressed.</p>	<p>Constant Murley DASH VAS Eq-5D Global impression of Sx change</p> <p>All assessed at baseline and 3/12 by independent blinded orthopaedic surgeon.</p> <p>Results: Significantly greater improvement in intervention group in all outcome measures</p>	<p>Limitations; randomization- performed by independent physio randomly allocating prepared envelopes.</p> <p>Only one physio involved in administering treatment of both groups-not blinded to assignment.</p> <p>Recruited from W.L. of one consultant.</p> <p>All patient had an injection</p>

## **Summary**

Supervised physiotherapy exercises lead to greater improvement compared to a single session of physiotherapy or leaflet in reducing pain and improving function in the medium to long term in patients with SIS, in combination with an injection.

## **Implications for Practice/research**

Patients with subacromial pain should be offered a specific physiotherapy lead exercise programme that will be progressed under supervision. This evidence can be used to inform patient pathway commissioning processes.

## **What would you tweet?**

Patients with subacromial pain should be offered a specific physiotherapy lead exercise programme that will be progressed under supervision.

## **References**

Roddy E, Zwierska I, Hay E, Jowett S, Lewis M, Stevenson K, Van de Windt D and Foster N. Subacromial impingement syndrome and pain: protocol for a randomized controlled trial of exercise and corticosteroid injection (the SUPPORT trial). BMC Musculoskeletal Disorders 2014 15:81.

Holmgren T, Bjornsson H, Oberg B, Adolfsson L and Johansson K. Effect of specific exercise strategy on need for surgery in patients with subacromial impingement syndrome. BMJ 2012 334:e787