Eerste bijeenkomst 2022 van het Schouder Netwerk Twente

12 april 2022, in Saxion Hogeschool Enschede

SchouderNetwerk Twente

AGENDA 12-04-2022

- Vanaf 17:30 uur: Ontvangst hal met koffie/ krentenwegge
- 18:00- 18:30 uur: Opening met mededelingen bestuur
  - *Zo nodig: inschrijven voor SNN congres op 10-06!*
  - *Promoveren Bart-Jan Veen - Herijken vereniging SNT*
  - *Ledenmutaties en bestuur-mutaties - Jaarcijfers*
- 18:30- 19:00 uur: Verloop ECS-project
- 19:00- 19:45 uur: SNT-enthousiasme & SNN-missie visie

19:45 – 20:15 uur: 'SNT-pauze'

- 20:15- 20:45 uur: HWO – Oefentherapie bij SAPS
- 20:45- 21.00 uur: Afronding, vragen

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Externe evidentie oefentherapie.

Welke levels van evidentie bestaan er ook alweer?
Is ‘externe evidentie’ hetzelfde als ‘best practice’?


- Hebben we veel onderbouwing?
- Weten we welke vorm van oefentherapie ‘werkt’?
- Of helpt het alleen maar?

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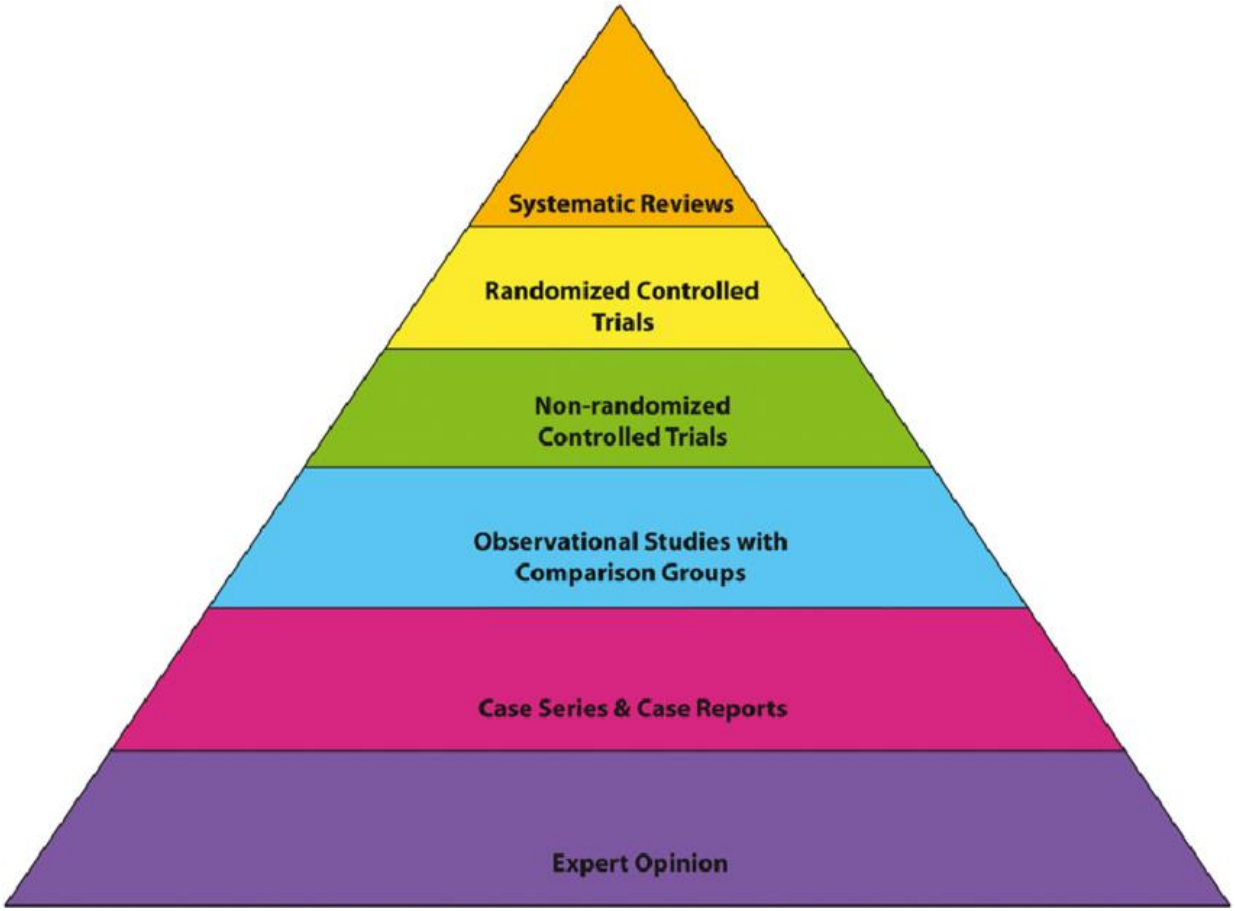

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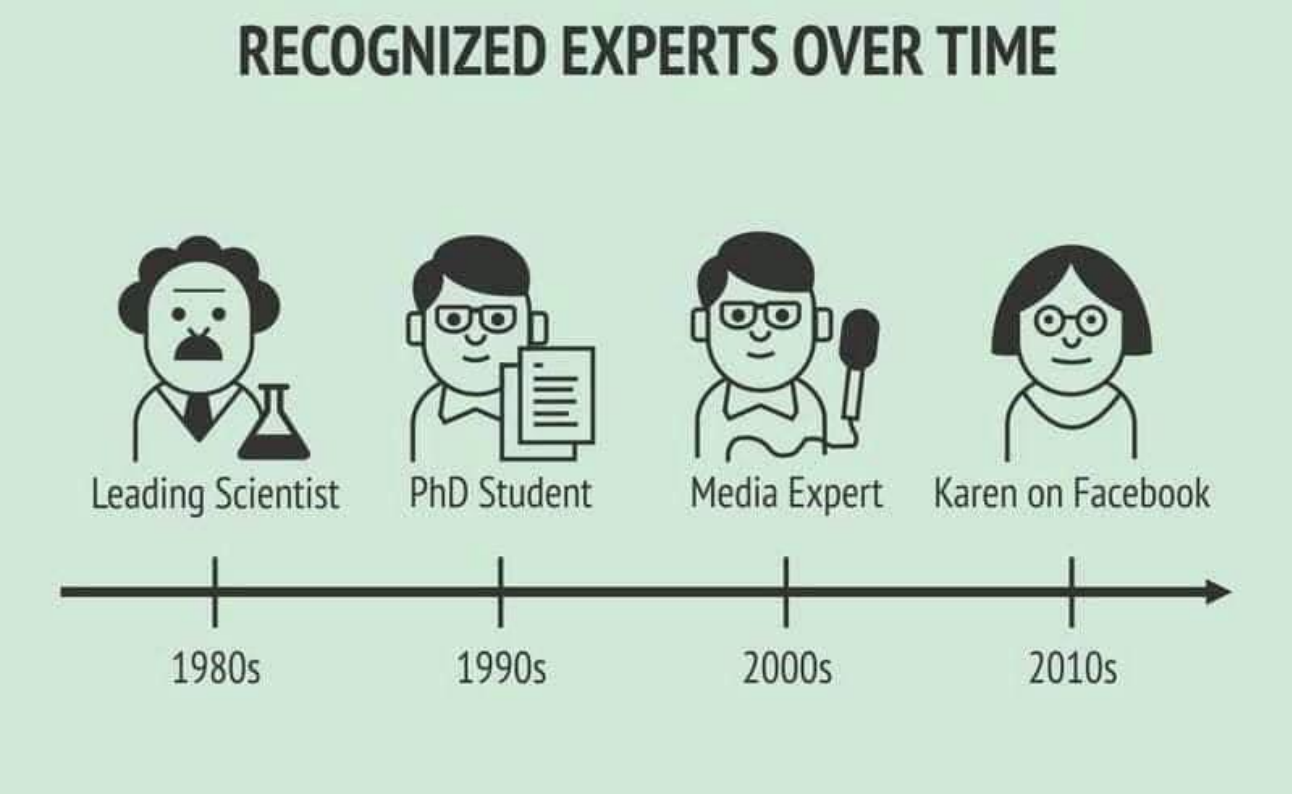
Of hanteren we liever deze .....



Over oefentherapie bij SAPS
Rationales, effectiviteit en externe evidentie

Externe evidentie oefentherapie bij SAPS/ RCR-SP patiënten.

1.Page MJ, Green S, McBain B, Surace SJ, Deitch J, Lyttle N, Mrocki MA, **Buchbinder** R. Manual therapy and exercise for rotator cuff disease. **Cochrane Database Syst Rev**. 10 juni 2016;(6):CD012224.

2.Bennell K, Wee E, Coburn S, Green S, Harris A, Staples M, et al. Efficacy of standardised manual therapy and home exercise programme for chronic rotator cuff disease: randomised placebo-controlled trial. *BMJ* 2010;340:c2756:1-10.

3.Clausen MB, Hölmich P, Rathleff M, Bandholm T, Christensen KB, Zebis MK, Thorborg K. Effectiveness of Adding a Large Dose of Shoulder Strengthening to Current Nonoperative Care for Subacromial Impingement: A Pragmatic, Double-Blind Randomized Controlled Trial (**SExSI Trial**). Am J Sports Med. 2021; 49:3040-49.

4.Hopewell S, Keene DJ, Marian IR, Dritsaki M, Heine P, Cureton L et al. Progressive exercise compared with best practice advice, with or without corticosteroid injection, for the treatment of patients with rotator cuff disorders (**GRASP**): a multicentre, pragmatic, 2 × 2 factorial, randomised controlled trial. Lancet. 31 July 2021;398(10298):416–28.

5.Schydlowsky P, Szkudlarek M, Madsen OR. Comprehensive supervised heavy training program versus home training regimen in patients with subacromial impingement syndrome: a randomized trial. BMC Musculoskelet Disord. 15 January 2022;23(1):52.

Oefentherapie bij SAPS/ RCR-SP

Mentimeter

- Ga naar: www.menti.com
- Vul in code: **3779 9242**

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Cochrane Library

Cochrane Database of Systematic Reviews

Manual therapy and exercise for rotator cuff disease (Review)

Page MJ, Green S, McBain B, Surace SJ, Deitch J, Lyttle N, Mrocki MA, Buchbinder R

Cochrane SR in 2016 over oefentherapie bij RCR-SP

- Matthew Page et al, Cochrane, 2016
- Page MJ, Green S, McBain B, Surace SJ, Deitch J, Lyttle N, e.a. Manual therapy and exercise for rotator cuff disease. Cochrane Database Syst Rev. 10 juni 2016;(6):CD012224.

- Exercise vs no therapy /placebo:
  4 RCT's:
  - Ludewig et al (2003)
  - Lombardi et al (2008)
  - Brox et al (1993)
  - Kachingwe et al (2008)

- Conclusie: **Very low evidence in favour of ExT to improve pain and function; clinical relevancy is questionable**

Authors' conclusions

Despite identifying 60 eligible trials, only one trial compared a combination of manual therapy and exercise reflective of common current practice to placebo. We judged it to be of high quality and found no clinically important differences between groups in any outcome. Effects of manual therapy and exercise may be similar to those of glucocorticoid injection and arthroscopic subacromial decompression, but this is based on low quality evidence. Adverse events associated with manual therapy and exercise are relatively more frequent than placebo but mild in nature. Novel combinations of manual therapy and exercise should be compared with a realistic placebo in future trials. Further trials of manual therapy alone or exercise alone for rotator cuff disease should be based upon a strong rationale and consideration of whether or not they would alter the conclusions of this review.

Manual therapy and exercise compared to placebo for rotator cuff disease

Patient or population: rotator cuff disease
Settings: Public hospital physiotherapy units and private physiotherapy practices, Australia
Intervention: soft tissue massage, glenohumeral joint mobilisation, thoracic spine mobilisation, cervical spine mobilisation, scapular retraining, postural taping and supervised exercises in 10 sessions over 10 weeks along with home exercises for 22 weeks
Comparison: inactive ultrasound therapy and application of an inert gel in 10 sessions over 10 weeks

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk				
	Placebo	manual therapy and exercise				
Overall pain Assessed with SPADI pain score Scale from 0-100 (higher score denotes less pain) Follow-up: 22 weeks	The mean improvement in overall pain score in the control group was **17.3**[1]	The mean improvement in overall pain score in the intervention group was **6.8 points higher** (-0.7 lower to 14.3 higher)	-	120 (1 RCT)	⊕⊕⊕⊕ **HIGH**	Absolute risk difference 7% (1% fewer to 14% more); relative percentage change 14% (1% fewer to 30% more) NNTB not applicable
Function Assessed with SPADI total score Scale from 0-100 (higher score denotes greater function) Follow-up: 22 weeks	The mean improvement in function score in the control group was **15.6**[1]	The mean improvement in function score in the intervention group was **7.1 points higher** (0.3 higher to 13.9 higher)	-	120 (1 RCT)	⊕⊕⊕⊕ **HIGH**	Absolute risk difference 7% (1% to 14% more); relative percentage change 16% (1% to 32% more) NNTB 6 (3 to 103)

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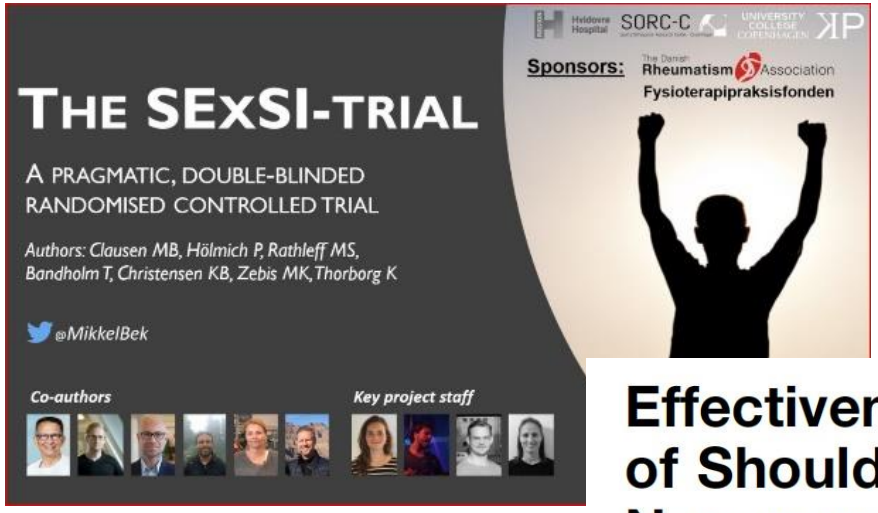

Effectiveness of Adding a Large Dose of Shoulder Strengthening to Current Nonoperative Care for Subacromial Impingement

A Pragmatic, Double-Blind Randomized Controlled Trial (SExSI Trial)

Mikkel Bek Clausen,[*†‡] PhD, Per Hölmich,[†] DMSc, Prof., Michael Rathleff,[§‖] PhD, Prof., Thomas Bandholm,[¶#] PhD, Prof., Karl Bang Christensen,[**] PhD, Mette Kreutzfeldt Zebis,[‡] PhD, and Kristian Thorborg,[†¶] PhD, Prof.

Investigation performed at the Sports Orthopedic Research Center–Copenhagen, Department of Orthopedic Surgery, Amager-Hvidovre Hospital, Institute of Clinical Medicine, University of Copenhagen, Copenhagen, Denmark

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SchouderNetwerken Nederland

Aanmelden Inloggen

Voor patiënten | Voor therapeuten | Scholing | Informatie SNN | Netwerk Starten? | SNN-leden

JOURNAL OF SHOULDER AND ELBOW SURGERY

JSES Abstracts

December 2021 JSES Nieuwe abstra...

Op deze pagina worden regelmatig de abstracts weergegeven van de onlangs verschenen artikelen van JSES die betrekking hebben op de Schouder en Elleboog of anders interess...

Discussie artikel

Artikel juni 2021...

Effectiveness of Adding a Large Dose of Shoulder Strengthening to Current Nonoperative Care for Subacromial Impingement: A Pragmatic, Double-Blind Randomized Controlled T...

Congressen

10-6-2022 – SNN/SNV SCHOUD...

Vrijdag 10 juni 2022, 's-Hertogenbosch Schoudernetwerk Nederland en Schoudernetwerk Vlaanderen organiseren gezamenlijk het 5e schoudercongres. Het thema "glur...

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Eligibility criteria

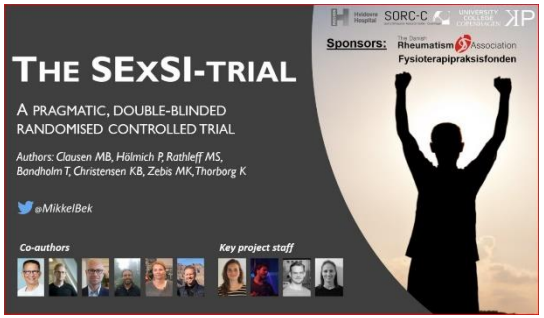
- ≥3 positive SIS-tests & > 3 mths
- Excl. other primary conditions

RANDOM

ADD-ON INTERVENTION

USUAL CARE

USUAL CARE



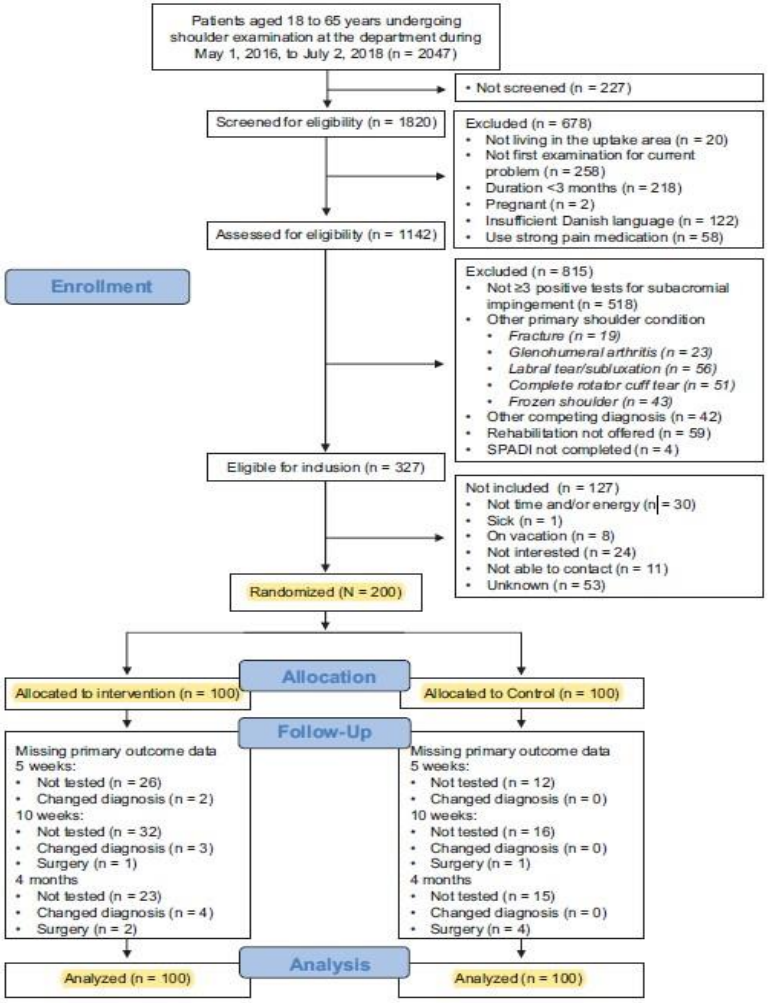
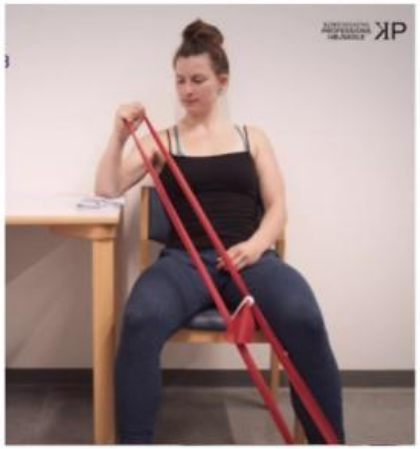
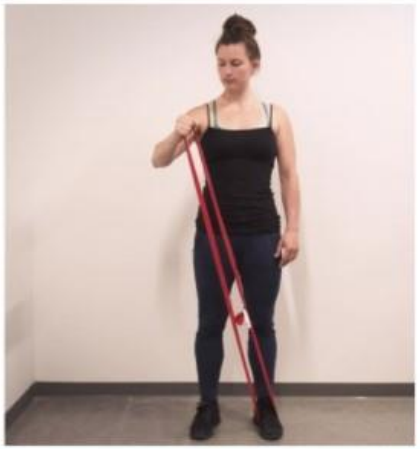


Figure 1. Study flowchart. SPADI, Shoulder Pain and Disability Index.

Participants in the IG underwent the add-on intervention "Strengthen Your Shoulder," a home-based, progressive, high-volume resistance training program including 1 to 3 exercises performed with an elastic band as external resistance. The program consisted of 3 phases with a duration of 5 to 6 weeks each. For each new phase, 1 exercise was added and the exercise load increased. All exercises targeted the rotator cuff muscles and were continued until contraction failure (muscular exhaustion) to facilitate an optimized physiological response.[4,25] The exercises were (1) external rotation with the elbow supported in approximately 45° of shoulder scaption, (2) abduction with a slight degree of scaption to approximately 45°, and (3) external rotation with the elbow unsupported in approximately 45° of scaption. The





EXERCISE 1

EXERCISE 2

EXERCISE 3

0 w — 3 sets/15-20 RM — 5 w — 4 sets/10-15 RM — 10 w — 6 sets/8-10 RM — 16 w

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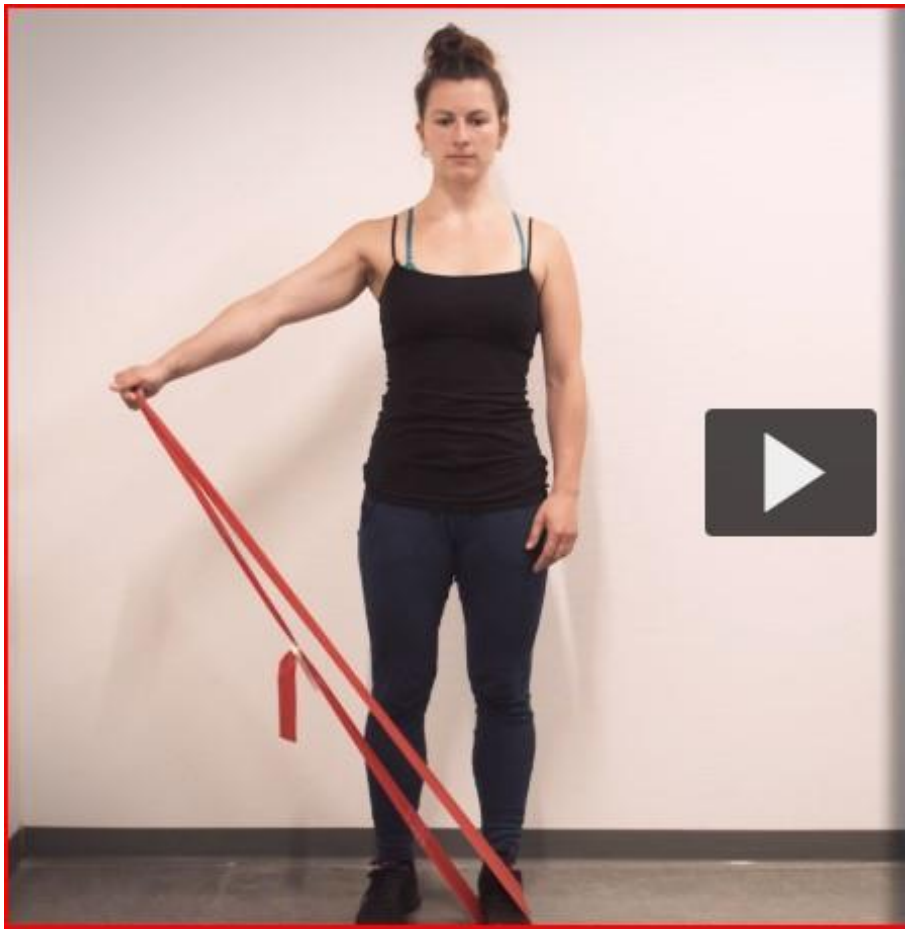
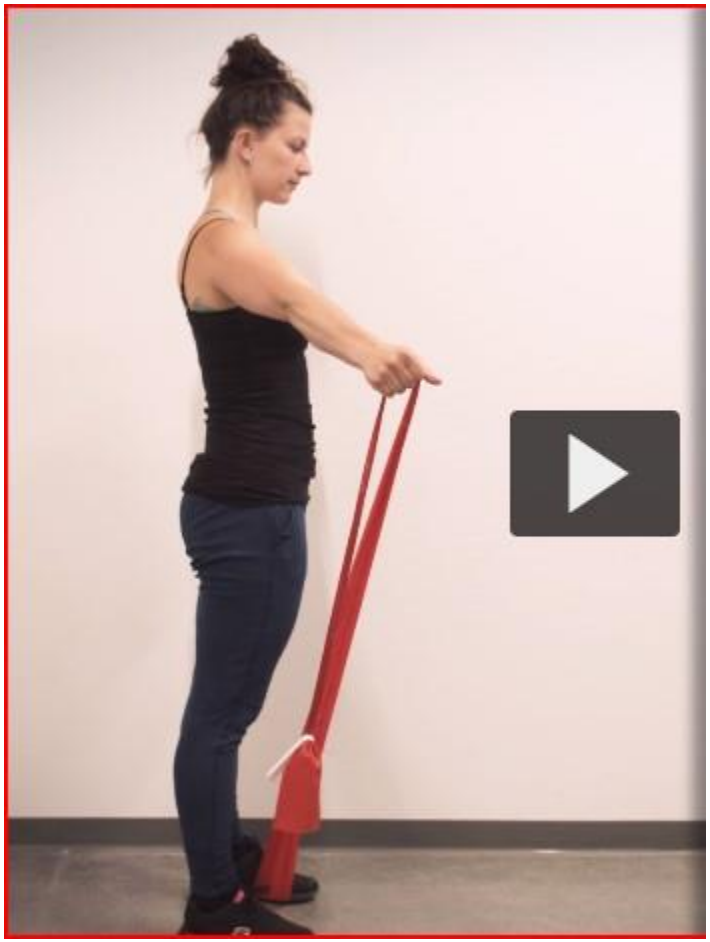
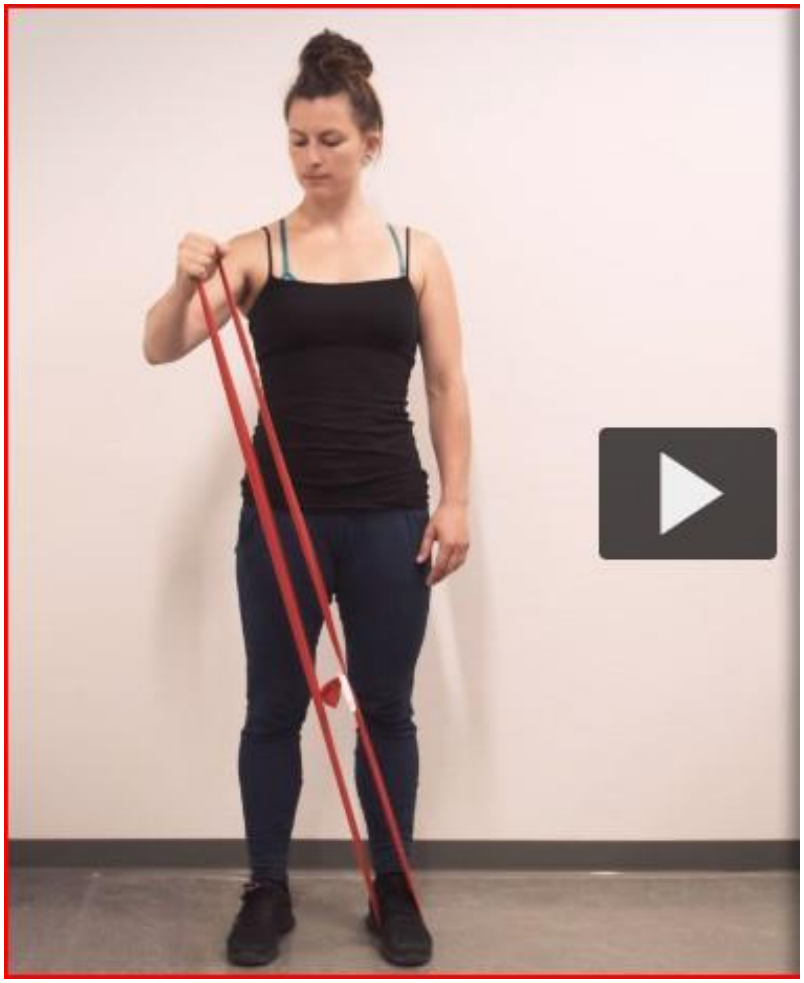
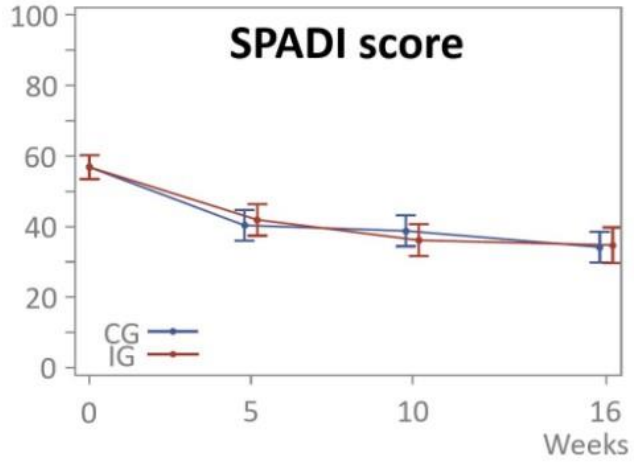
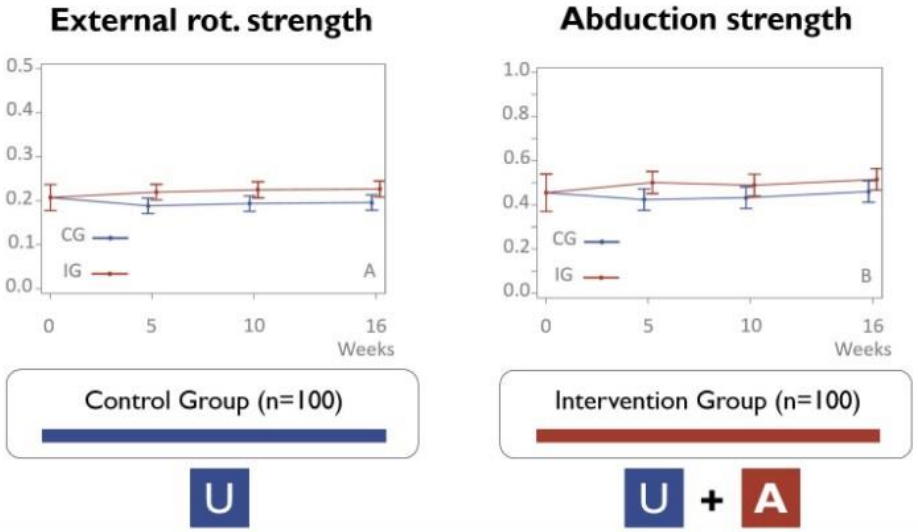








No difference
0.6 points
(95%CI -5.5 to 6.6)



Verschil in SPADI score:

- Beide groepen verbeteren 22 punten
- Geen verschil tussen beide groepen

Verschil in kracht:

- Interventie groep lijkt iets beter
- Waarom niet in absolute Nm maar in NM/kg lichgew

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Mikkel Bek Clausen @MikkelBek · 28 mei

9/
RESULTS: Despite the prescription of a large additional exercise dose, we found NO difference between groups. Not in patient-reported disability (SPADI), nor in strength, ROM or QoL.
Confidence limits for SPADI did not surpass the margin of clinical relevance (10 pts).

Gerard Koel @gerard_koel · 31 mei

IMO the rehab training in SExSI trial could be used in the beginning of the rehab period, it is mainly isometric with small ROM. It's not a large program and not improving daily functioning. IMO the conclusions of @MikkelBek are premature and determined by an inproper program.

Mikkel Bek Clausen @MikkelBek · 28 mei

9/
RESULTS: Despite the prescription of a large additional exercise dose, we found NO difference between groups. Not in patient-reported disability (SPADI), nor in strength, ROM or QoL.
Confidence limits for SPADI did not surpass the margin of clinical relevance (10 pts).

2

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Mikkel Bek Clausen @MikkelBek · 28 mei

10/

Time spent on usual care exercise differed between groups. Adjusting did not change results, showing that these would not be different if patients had spent an equal amount of time on usual care exercise.

Also indicates that pts were not able/willing to increase exerc. dose

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Progressive exercise compared with best practice advice, with or without corticosteroid injection, for the treatment of patients with rotator cuff disorders (GRASP): a multicentre, pragmatic, 2 × 2 factorial, randomised controlled trial

Sally Hopewell, David J Keene, Ioana R Marian, Melina Dritsaki, Peter Heine, Lucy Cureton, Susan J Dutton, Helen Dakin, Andrew Carr, Willie Hamilton, Zara Hansen, Anju Jaggi, Chris Littlewood, Karen L Barker, Alastair Gray, Sarah E Lamb, on behalf of the GRASP Trial Group*

Lancet 2021; 398: 416–28
Published Online July 12, 2021
https://doi.org/10.1016/S0140-6736(21)00846-1

Summary

Background Corticosteroid injections and physiotherapy exercise programmes are commonly used to treat rotator cuff disorders but the treatments' effectiveness is uncertain. We aimed to compare the clinical effectiveness and cost-effectiveness of a progressive exercise programme with a single session of best practice physiotherapy advice, with or without corticosteroid injection, in adults with a rotator cuff disorder.

BMJ Open

Clinical and cost-effectiveness of progressive exercise compared with best practice advice, with or without corticosteroid injection, for the treatment of rotator cuff disorders: protocol for a 2x2 factorial randomised controlled trial (the GRASP trial)

Sally Hopewell,[1] David J Keene,[1] Michael Maia Schlüssel,[1] Melina Dritsaki,[1] Susan Dutton,[1] Andrew Carr,[1] William Hamilton,[2] Zara Hansen,[1] Anju Jaggi,[3] Chris Littlewood,[4] Hessam Soutakbar,[1] Peter Heine,[1] Lucy Cureton,[1] Karen Barker,[5] Sarah E Lamb[1]

To cite: Hopewell S, Keene DJ, Maia Schlüssel M, *et al*. Clinical and cost-effectiveness of progressive exercise compared with best practice advice, with or without corticosteroid injection, for the treatment

ABSTRACT

Introduction Shoulder pain is very common, with around 70% of cases due to disorders of the rotator cuff. Despite widespread provision of physiotherapy, there is uncertainty about which type of exercise and delivery mechanisms are associated with best outcomes. There is also uncertainty

Strengths and limitations of this study

- The Getting it Right: Addressing Shoulder Pain trial is a large multicentre randomised controlled trial based in primary care and primary care interface services.

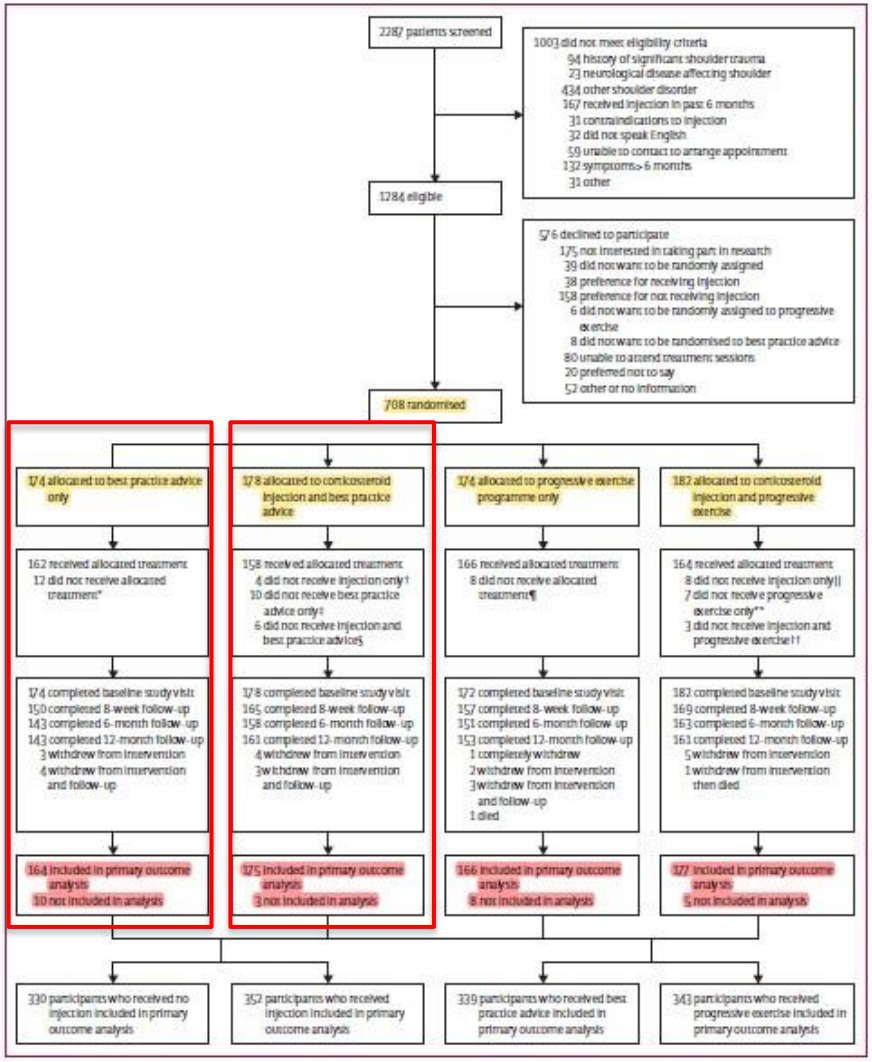

Figure 1: Trial profile
All participants with at least one follow-up timepoint SPADI outcome and the baseline variables used in the model were included in the primary outcome analysis.
GRASP=Getting It Right: Addressing Shoulder Pain. SPADI=Shoulder Pain and Disability Index. *Reasons for not receiving best practice advice were participant did not attend session (n=5), withdrawal (n=4), or other medical condition (n=3). †Reasons for not receiving injection only were participant declined treatment (n=2) or contraindicated (n=1 taking anticoagulants and n=1 previous reaction to injection). ‡Reasons for not receiving best practice advice only were participant did not attend session (n=5), other medical condition (n=2), received progressive exercise in error (n=3). §Reasons for not receiving injection and best practice advice were participant did not attend session (n=1), participant declined treatment (n=2), other medical condition (n=2), or previous reaction to injection and received non-GRASP treatment (n=1). ¶Reasons for not receiving progressive exercise were participant did not attend session (n=3), received best practice advice in error (n=2), received injection in error (n=1), received non-GRASP treatment (n=1), or withdrawal (n=1). ‖Reasons for not receiving injection only were participant declined treatment (n=5) or clinician declined treatment (n=3). **Reasons for not receiving progressive exercise only were received best practice advice in error (n=2), received non-GRASP treatment (n=3), other medical condition (n=1), or participant did not attend session (n=1). ††Reasons for not receiving injection and progressive exercise were participant did not attend session (n=2) or other medical condition (n=1).

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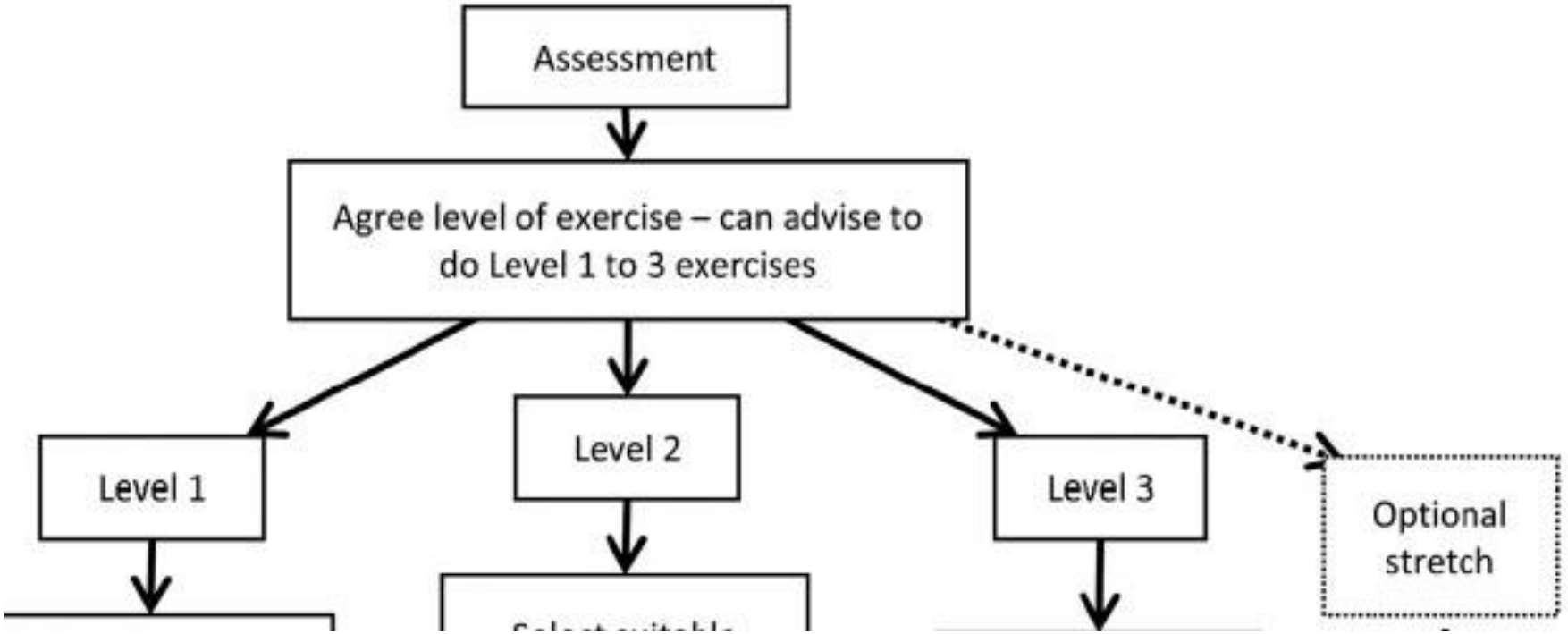

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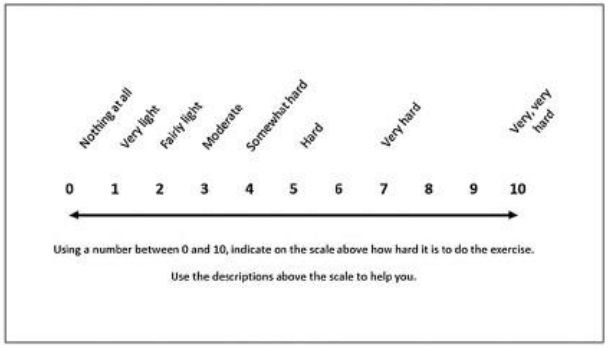


With participant choose an exercise likely to be suitable

Estimate a **suitable starting load** and **attempt 3 repetitions**

Participant rates the perceived exertion (RPE) from 0 to 10 using Modified Borg scale

RPE 2 or less:
increase resistance, range of movement, or choose a new exercise as appropriate and repeat rating procedure

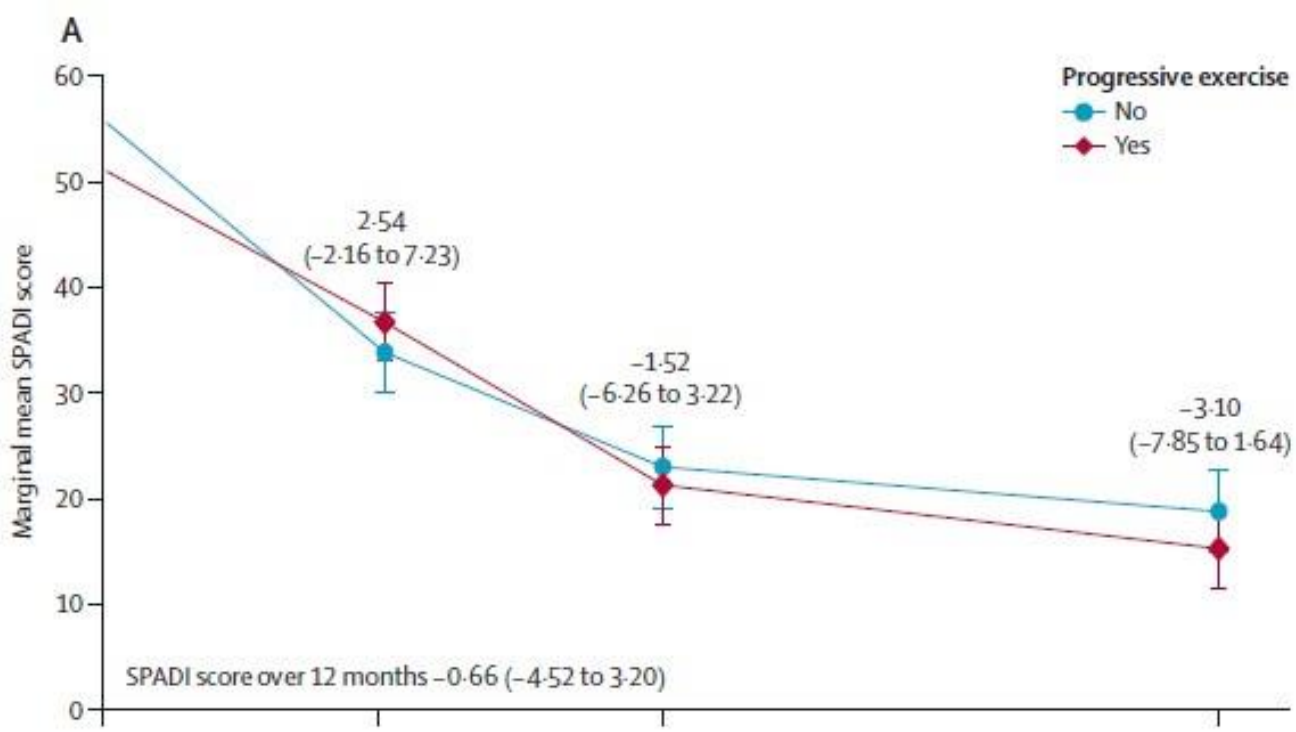
RPE 3 or 4:
complete 5 more repetitions (rest of set) to ensure can manage 8 repetitions in total. If manageable, this is the starting exercise and resistance level. If not, reduce resistance, range of movement, or choose a different exercise.

RPE 5 or more:
decrease resistance, range of movement, or choose a new exercise as appropriate and repeat rating procedure

RPE 2 or less:
increase resistance, range of movement, or choose a new exercise as appropriate and repeat rating procedure

RPE 3 or 4:
complete 5 more repetitions (rest of set) to ensure can manage 8 repetitions in total. If manageable, this is the starting exercise and resistance level. If not, reduce resistance, range of movement, or choose a different exercise.

RPE 5 or more:
decrease resistance, range of movement, or choose a new exercise as appropriate and repeat rating procedure



Verschil in SPADI score:

- In beide groepen 25 punten verschil
- Geen significante en klinisch relevante verschillen tussen beide groepen

Implications of all the available evidence

The GRASP trial shows that a single face-to-face session with a physiotherapist is likely to be more cost-effective and is not significantly different in terms of clinical outcomes when compared with a comprehensive physiotherapy intervention of up to six face-to-face sessions. This finding is particularly important given the incidence of rotator cuff disorders and the need to develop cost-effective and pragmatic methods of dealing with this high volume of conditions. Subacromial corticosteroid injection provides a modest short-term but no long-term benefit, as seen in other trials, and was associated with participants being more likely to report doing their exercises as advised.

Schydlowsky *et al.*
BMC Musculoskeletal Disorders (2022) 23:52
https://doi.org/10.1186/s12891-021-04969-0

BMC Musculoskeletal Disorders

RESEARCH Open Access

Comprehensive supervised heavy training program versus home training regimen in patients with subacromial impingement syndrome: a randomized trial

Pierre Schydlowsky[1*], Marcin Szkudlarek[1,2,3] and Ole Rintek Madsen[4]

Abstract

Background: There is no consensus on the best training regimen for subacromial impingement syndrome (SIS). Several have been suggested, but never tested.

The purpose of the study is to compare a comprehensive supervised training regimen (STR) based on latest evidence including heavy slow resistance training with a validated home-based regimen (HTR). We hypothesized that the STR would be superior to the HTR.

Table 1 Baseline characteristics

	STR Group $n=63$	HTR Group $n=63$	p
Age (mean ± SD)	61.7 ± 13.4	60.3 ± 13.0	0.56
Male/female (n)	33/30	32/31	–
Employment status:			
Employed/unemployed/full time sick leave/partial sick leave/retired (n)	33/2/2/0/26	33/3/2/0/25	–
Shoulder scores (mean ± SD)			
Constant Score (0–100)	37.7 ± 11.6	36.3 ± 9.7	0.47

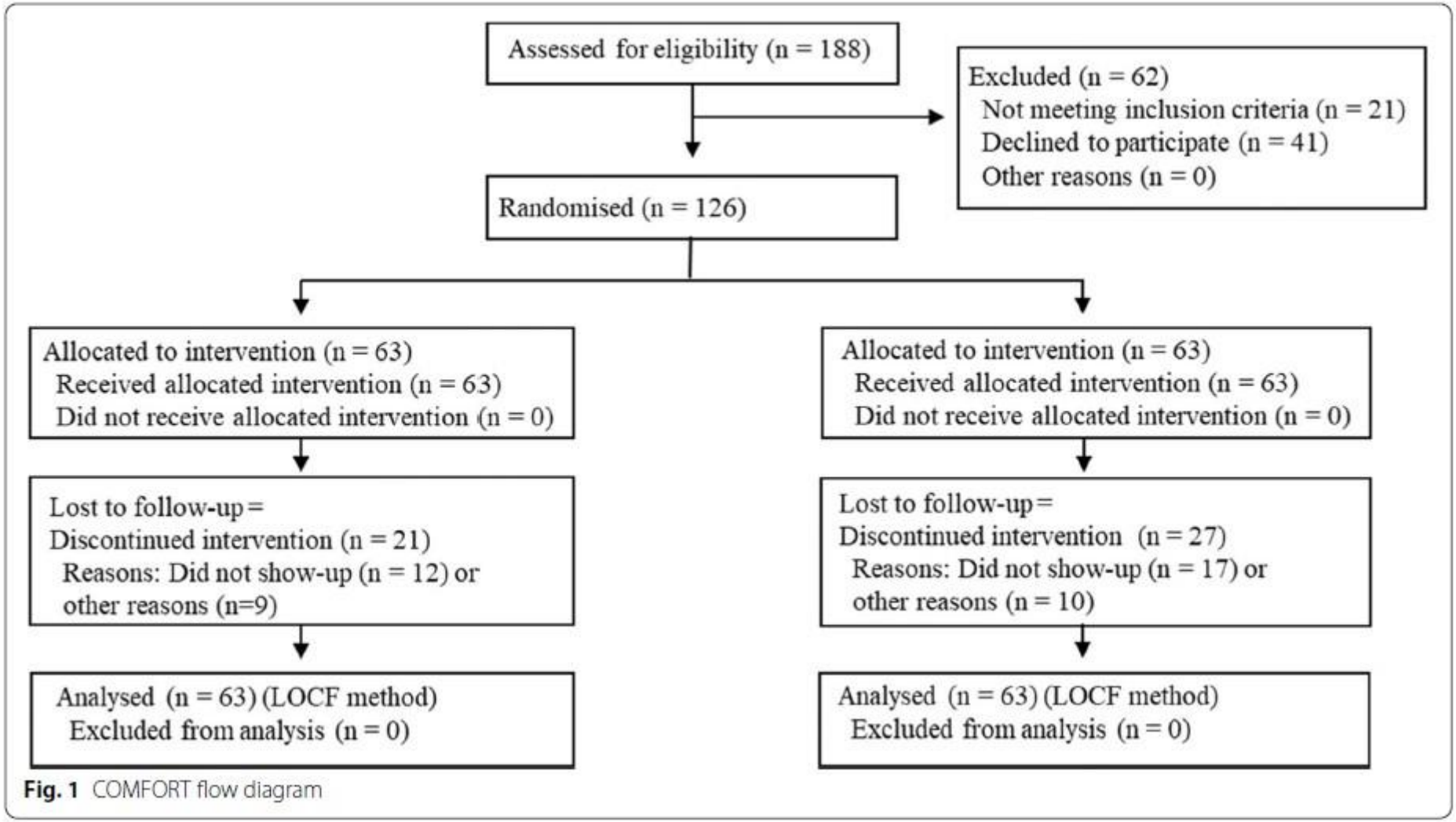


Fig. 1 COMFORT flow diagram

Abstract

Background: There is no consensus on the best training regimen for subacromial impingement syndrome (SIS). Several have been suggested, but never tested.

The purpose of the study is to compare a comprehensive supervised training regimen (STR) based on latest evidence including heavy slow resistance training with a validated home-based regimen (HTR). We hypothesized that the STR would be superior to the HTR.

Methods: Randomised control trial with blinded assessor. 126 consecutive patients with SIS were recruited and equally randomised to 12 weeks of either supervised training regimen (STR), or home-based training regimen (HTR). Primary outcomes were Constant Score (CS) and Shoulder Rating Questionnaire (SRQ) from baseline and 6 months after completed training. Results were analyzed according to intention-to treat principles. The study was retrospectively registered in ClinicalTrials.gov. Date of registration: 07/06/2021. Identification number: NCT04915430.

Results: CS improved by 22.7 points for the STR group and by 23,7 points for the HTR ($p = 0.0001$). The SRQ improved by 17.7 and 18.1 points for the STR and the HTR groups respectively ($p = 0.0001$). The inter-group changes were non-significant. All secondary outcomes (passive and active range of motion, pain on impingement test, and resisted muscle tests) improved in both groups, without significant inter-group difference.

Conclusion: We found no significant difference between a comprehensive supervised training regimen including heavy training principles, and a home-based training program in patients with SIS.

Keywords: Shoulder, Rotator cuff, Subacromial impingement syndrome, Training, Heavy slow resistance training

Table 5 Dropouts

	STR Group *n* = 63	HTR Group n = 63	p
Dropout rate at			
Visit 2	5	8	0.418
Visit 3	8	12	0.335
Visit 4	13	19	0.218
Visit 5	21	27	0.274

"N-1" Chi-squared test as recommended by Campbell (2007) and Richardson (2011)

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Kenmerken zinvolle oefentherapie.

Waarom vinden we onze klinische resultaten beter?
Of is oefentherapie (net als MT iez) ook grotendeels placebo?
En zijn niet-specifieke effecten gelijk aan placebo effecten?

Zijn niet-somatische effecten gelijk aan placebo effecten?

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Afsluiting oefentherapie bij SAPS

Waarom veroorzaken RC-pezen SP (SAPS/ RCR-SP)?
Welke oefentherapie programma's onderscheiden we?
Wat zijn mogelijke rationales/ verklaringsmodellen?
Heeft dat invloed op de wijze waarop we oefentherapie toepassen?
Hoe gaan we om met de matige externe evidentie?
Wat maakt 'onze' oefentherapie beter dan die in studies?

Ik heb SP rechts en oefen om .....

Somatische
doelen te realiseren;
en wel verbeteren van:

- Trekvastheid SS pees
- Kracht schouderspieren
- Uithoudingsvermogen
- Motor control
- Coördinatie
- Kwaliteit van bewegen
- Fitheid
- Mobiliteit
- ADL functioneren
- Werk performance

Niet-Somatische
doelen te realiseren;
en wel verbeteren van:

- Zelfvertrouwen
- Vertrouwen in FT beleid
- Zelfredzaamheid bij SP
- Inzicht in SP
- Disfunctionele cognities
- Lef om te bewegen
- Segmentale sensitisatie
- Centrale sensitisatie
- Externe coping stijl
- Kwaliteit van Leven

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Waarde oefentherapie.

1. Oefentherapie blijft meest relevante FT interventie.
2. De subdoelen voor oefentherapie zijn breed (multimodale analyse); durf ook niet-somatische doelen specifieker na te streven.
3. Pas de oefentherapie aan: bij de doelen, bij de patiënt, stadium,
   zorg er voor dat de oefeningen betekenisvol zijn.
4. Kies het goede type/ programma; maar:
   zorg voor variatie, maak 't uitdagend, pas de dosis aan.
5. Oefen**therapie** is niet hetzelfde als bewegingen laten uitvoeren!

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BEDANKT &
FORZA FYSIOTHERAPIE!