Eerste live-bijeenkomst 2025 van het Schouder Netwerk Twente

11 maart 2025, Saxion Hogeschool Enschede

SchouderNetwerk Twente

AGENDA 11-03-2025

- Vanaf 17:30 uur: *Ontvangst in het Saxion restaurant (BG) met koffie/ krentenwegge*
- 18:00 - 18:30 uur: Opening met mededelingen bestuur *in Bannink theater (BG)*
- 18:30 - 19:00 uur: NOV-richtlijn 2025 deel 1
- 19:00 - 19:30 uur: NOV-richtlijn 2025 deel 2

19:30 – 20:00 uur: 'SNT-pauze'

- 20:00 - 20:45 uur: Pro/cons RC repair *Moosmayer 2024, MOON studie 2024, met ECS-project over 1e vs 2e lijn*
- 20:45 - 21.00 uur: Afronding, vragen
- *SNT activiteiten 2025: 03-06 (18&19-09, 09-12)*

SHOULDER & ELBOW THERAPY CONGRESS "JOINT GOALS"

SEPT. 18 & 19, 2025

DE DOELEN, ROTTERDAM

SCHOUDERNETWERK VLAANDEREN

SchouderNetwerken Nederland

EUSSER

Federatie
Medisch
Specialisten

Subacromiaal Pijnsyndroom van de Schouder (SAPS)

Aanvaardbaarheid, haalbaarheid en implementatie

Fysiotherapie/oefentherapie voor schouderklachten is een gangbare behandeling. Afzien van een operatie is aan patiënten goed uit te leggen, gezien de grote succeskans van conservatieve behandeling en de nadelige effecten van operatieve behandeling (te weten langdurige revalidatie en tijdelijke sociale beperkingen). Doordat veel patiënten al bij een oefen-/fysiotherapeut zijn geweest, is de acceptatie van conservatieve behandeling mogelijk minder. Hier is mogelijk een plek voor een fysiotherapeut die gespecialiseerd is in behandeling van schouderaandoeningen. Ook zal er een groep blijven die ondanks conservatieve behandeling klachten blijft houden. De werkgroep adviseert dan ook bij implementatie van conservatief beleid om patiënten drie maanden na start van conservatieve behandeling te controleren. Indien conservatieve behandeling onvoldoende effectief is, kan nadere diagnostiek (zie module Beeldvormende technieken) en operatieve behandeling overwogen worden. Het afwegen van belangrijke prognostische factoren is hierbij noodzakelijk (zie module Prognostische factoren).

Een schoudergespecialiseerde fysiotherapeut.

Federatie Medisch Specialisten

Operatieve versus niet-operatieve behandeling

Uitgangsvraag

Wat is de plaats van rotator cuff repair in vergelijking met oefen-/fysiotherapie (met of zonder een corticosteroïdeninjectie) bij patiënten met een geïsoleerde degeneratieve supraspinatuspeesruptuur?

Aanbeveling

Schrijf bij patiënten met SAPS-klachten en een geïsoleerde, symptomatische en niet-traumatische supraspinatusruptuur als eerste een conservatieve behandeling voor (i.e. oefentherapie gegeven door een oefen- of fysiotherapeut met affiniteit voor de behandeling van schouderklachten, eventueel in combinatie met een corticosteroïdeninjectie).

Overweeg een operatie (rotator cuff repair) indien adequate conservatieve behandeling na 3-6 maanden niet succesvol is (i.e. oefentherapie gegeven door een oefen- of fysiotherapeut met affiniteit voor de behandeling van schouderklachten, eventueel in combinatie met een corticosteroïdeninjectie).

Een fysiotherapeut met schouder affiniteit.

RCRSP-patiënten met een FTR in de RC-pees/ pezen; opereren of fysiotherapie?

- Inhoudelijk deel SNT-bijeenkomst 11-03
- Met HWO als voorbereiding.
- Kern-artikel: Moosmayer et al 2024.
- door: Gerard Koel, SNT commissie VI

Fifteen-Year Results of a Comparative Analysis of Tendon Repair Versus Physiotherapy for Small-to-Medium-Sized Rotator Cuff Tears

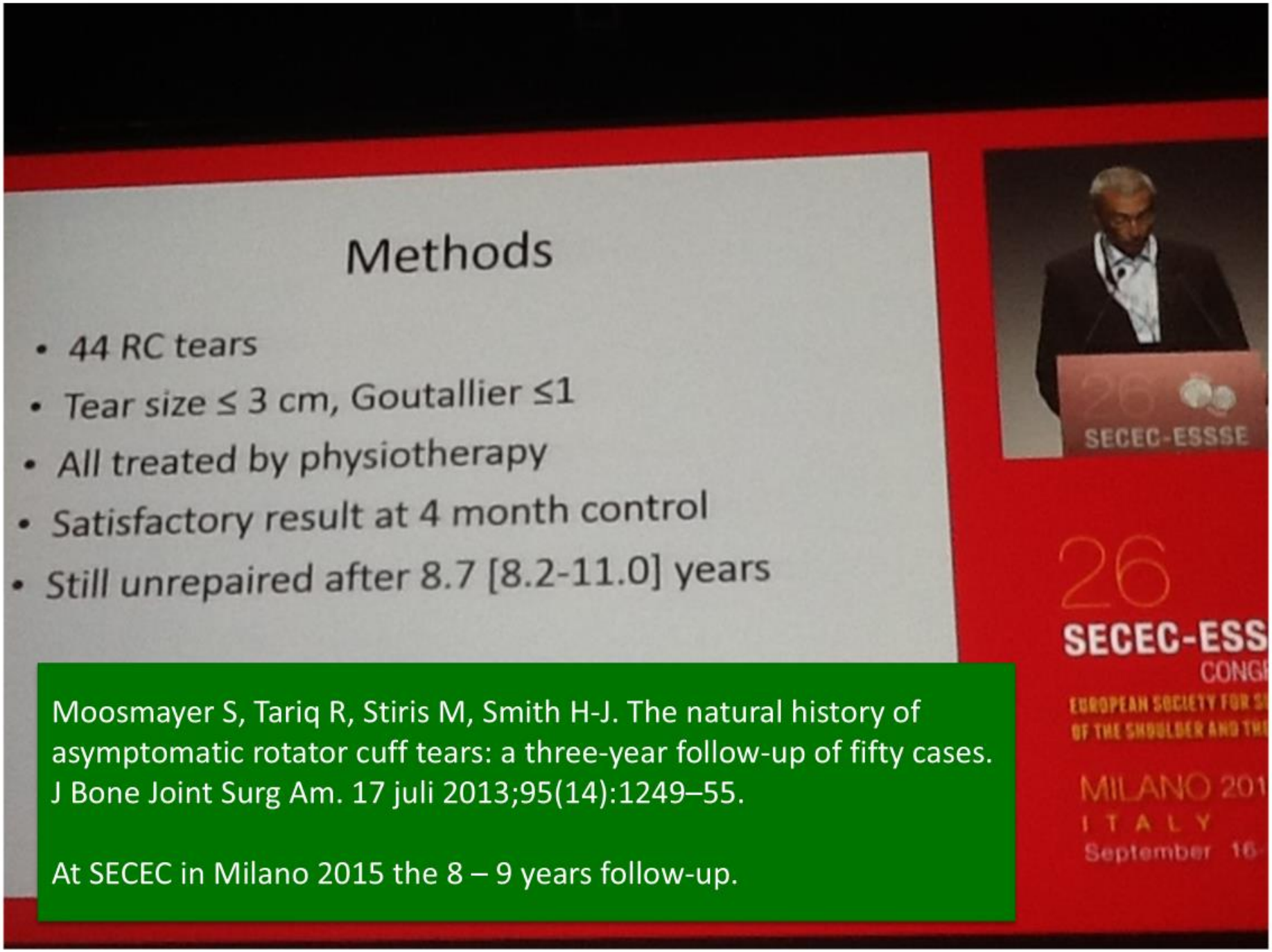
A Concise Follow-up of Previous Reports*

S. Moosmayer, MD, PhD, G. Lund, PT, U. Sire Seljom, PT, B. Haldorsen, PT, I.C. Svege, PT, T. Hennig, OT, A.H. Pripp, PhD, and H.J. Smith, MD, PhD

Investigation performed at Martina Hansen's Hospital, Gjettum, Norway

Abstract: The optimal treatment for small-to-medium-sized rotator cuff tears remains a topic of debate. While both tendon repair and physiotherapy have shown comparable short-term results, there are concerns about the long-term effectiveness of physiotherapy. In 2 previous reports presenting the 5 and 10-year results of this trial, significant and increasing differences were observed in favor of tendon repair. Further investigation of the unexplored time interval after 10 years is essential to fully understand the implications of our treatment approaches. A total of 103 patients with a full-thickness rotator cuff tear not exceeding 3 cm were randomly allocated to tendon repair or physiotherapy with optional secondary repair. Measurements of shoulder function were performed by a blinded assessor at 6 months and 1, 2, 5, 10, and 15 years. The outcome of primary interest was the 15-year result for the Constant score. Secondary outcome measures included the self-report section of the American Shoulder and Elbow Surgeons (ASES) score; the Short Form-36 (SF-36) Health Survey; assessments of pain, motion, and strength; and patient satisfaction. Tear-size increase in unrepaired tears was assessed by sonography. Statistical analysis was by mixed-model analysis for repeated measurements and by intention to treat. Eighty-three (81%) of 103 patients attended the 15-year follow-up. Fifteen of 51 patients in the physiotherapy group had crossed over to secondary surgery. Results from primary tendon repair were superior by a mean difference of 11.8 points for the Constant score ($p = 0.001$), 13.9 points for the ASES score ($p < 0.001$), 1.8 cm on a 10-cm visual analog scale for pain ($p < 0.001$), and 16.2° and 22.4°, respectively, for pain-free abduction and flexion ($p = 0.04$ and 0.001). On the SF-36, differences did not reach significance for any of the scoring scales. In 26 tears treated by physiotherapy only, the mean tear size had increased from 16.2 to 31.6 mm in the anterior-posterior direction. Long-term outcomes from primary tendon repair remained superior to physiotherapy up to 15 years of follow-up, supporting its use as the primary treatment for small-to-medium-sized rotator cuff tears.

Level of Evidence: Therapeutic Level I. See Instructions for Authors for a complete description of levels of evidence.



Moosmayer S, Tariq R, Stiris M, Smith H-J. The natural history of asymptomatic rotator cuff tears: a three-year follow-up of fifty cases. J Bone Joint Surg Am. 17 juli 2013;95(14):1249–55.

At SECEC in Milano 2015 the 8 – 9 years follow-up.

26 SECEC-ESSSE CONGRESS | EUROPEAN SOCIETY FOR SURGERY OF THE SHOULDER AND THE ELBOW

MILANO 2015 ITALY September 16-19

RESPONSIVENESS of CMS in 1st LINE PT PRACTICE

EUSSER EUROPEAN SOCIETY FOR SHOULDER AND ELBOW REHABILITATION

by: Gerard Koel, Donald van der Burg, Frits Oosterveld

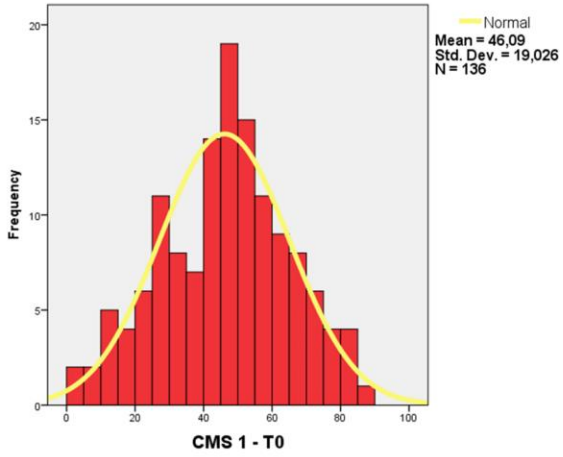
g.j.koel@saxion.nl ; *Saxion University of Applied Sciences & Shoulder Network Twente, Enschede, Netherlands*

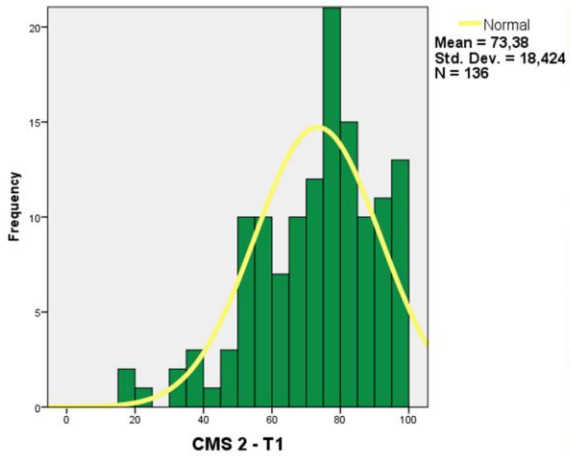
SAXION &

A longitudinal diagnostic study to determine MCIB and SCIB of CMS

*MCIB: **Minimal** Clinical Important Benefit; SCIB: **Substantial** Clin. Important Benefit; CMS: Constant Murley Scale*

Introduction	Inclusion (n=136)	Measures T0	PT - 1st line	Measures T1
- CMS= PT popular meas. - Scores on 4 domains *Pain, ADL, Mobility, Strength scored by 'trained' PT's (SNT) 0 – 100, 0= worst / 100 = best* - MCIB / SCIM not clear	- Unilateral Shoulder Pain - 18 – 80 Years old - No surgery *(6 months)* - No other arm problem - First line PT practice	- Sociodemographic data - Clin. Signs & symptoms - Classification of Sh.Pain and: - **CMS 1 – T0**	*Pragmatic trial: 'best' PT treatment based on clinical reasoning; patients got an average of 9 treatments in 8 weeks. No control group.*	- **CMS 2 – T1** - And a **6 pt Likert Scale** *1- Completely solved* *2- Clearly better = Substantial eff.* *3- Somewhat better = Minimal effect* *4- The same = No clin. effect* *5- Somewhat worse/ 6- Clearly worse*

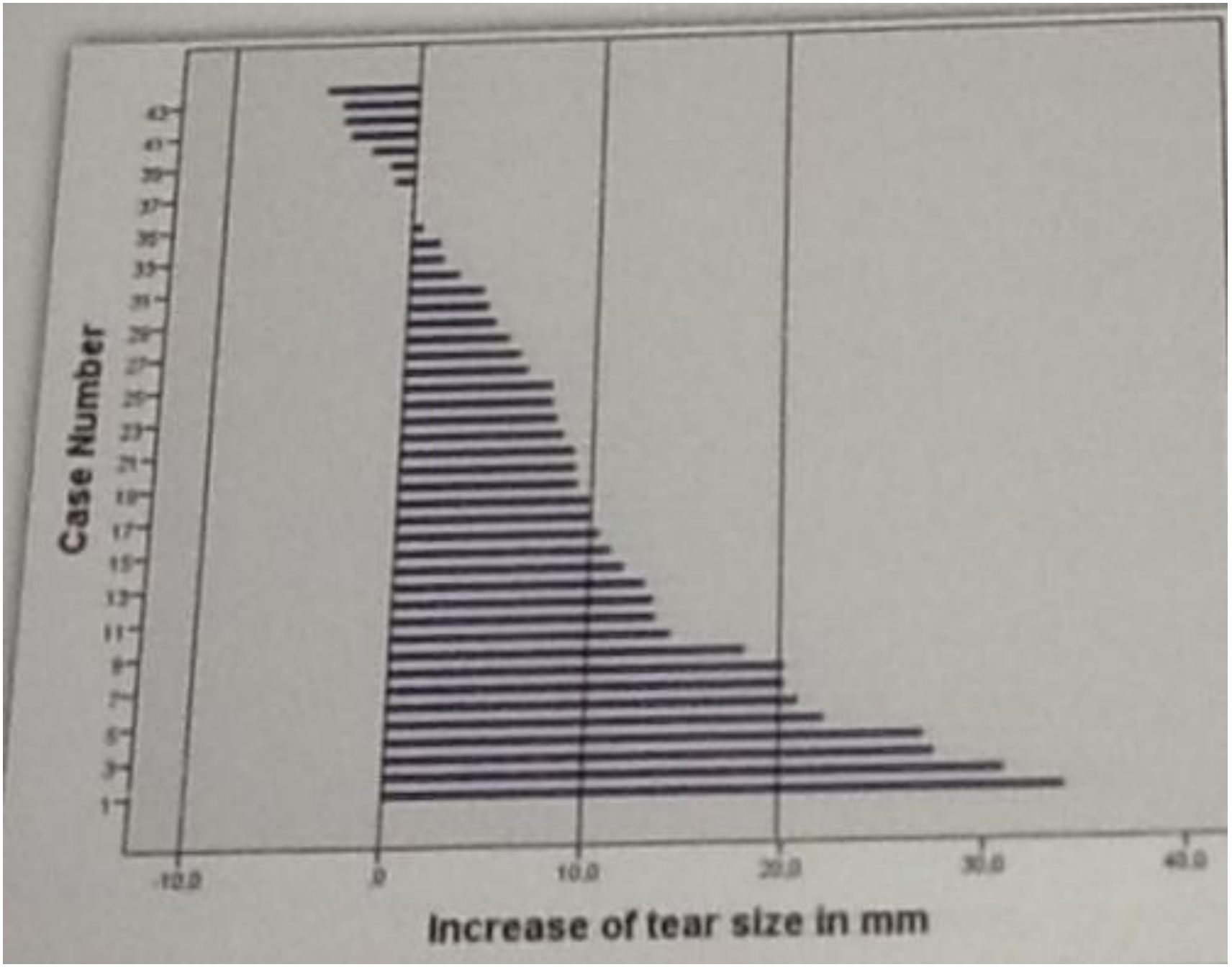




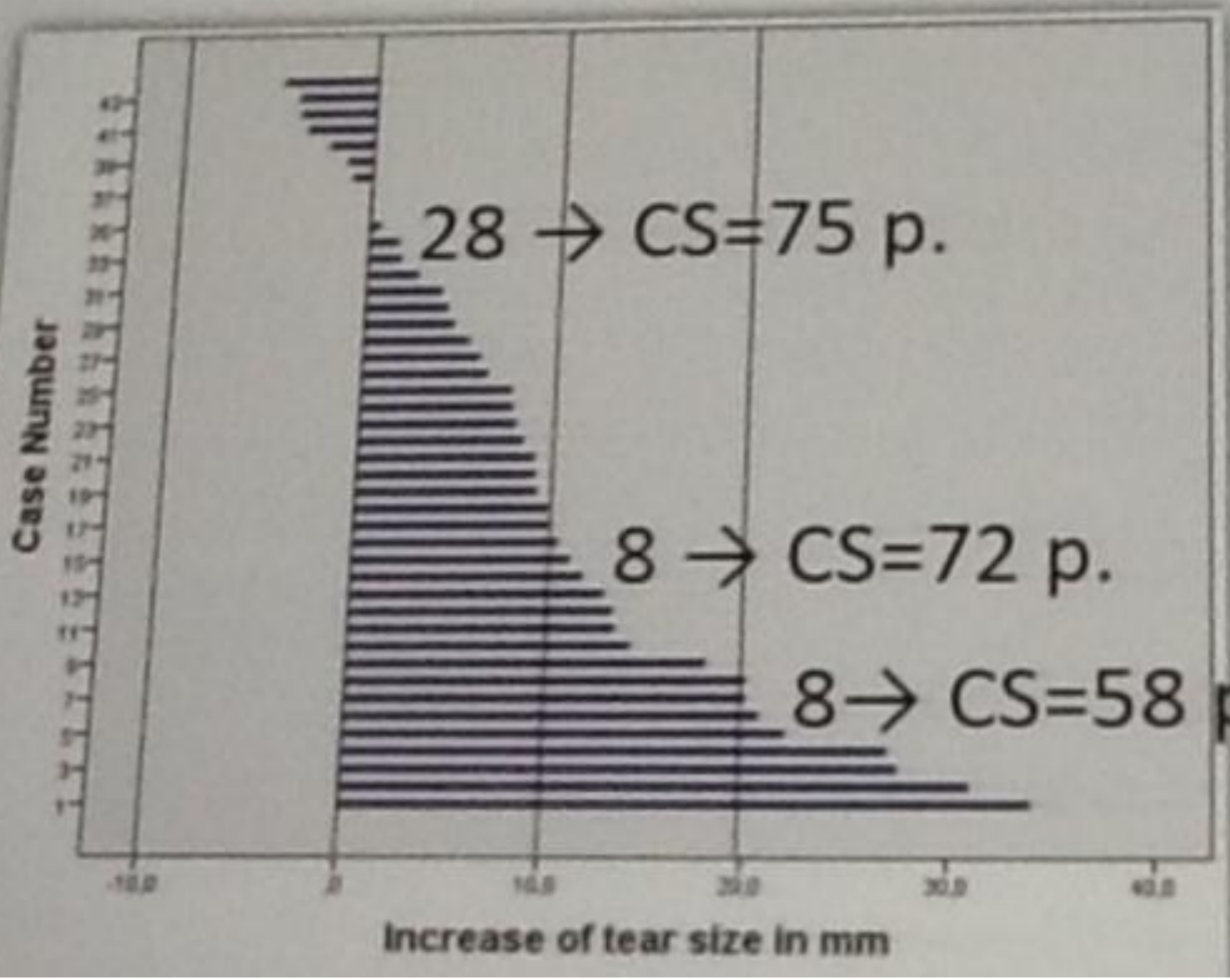
		CMS 1	CMS 2	CMS_{diff}
Total	(n=136)	46,0	73,3	**27,3**
Clearly better	(n=69)	43,5	77,1	**33,6**
Somewhat better	(n=23)	50,6	62,8	**12,2**
The same	(n=12)	49,2	55,8	**6,6**

MCIB	Somewath b. – the same= 12,2 – 6,6	**5,6 pt.**	*T test p= 0,122*
SCIB	Clearly better – the same= 33,6 – 6,6	**27 pt.**	*T test p < 0,001*

Message: to score a +treatmentresponse: 'good' shoulders ↑ by 27 pt.& reach 75 pt.!


Case Number
-10.0
0
10.0
20.0
30.0
40.0
Increase of tear size in mm

Tear size increase versus CS



	Tear size increase		P value
	<2 cm (n=36)	≥2 cm (n=8)	
Constant score (points)	74	58	0.03
ASES score (points)	81	65	0.05
VAS pain (cm)	1.9	4.3	0.02

Dus:
- Langzaam toenemende RC rupturen >> weinig relevante en significante veranderingen
- Sterk toenemende RC rupturen (>2cm) >> wel relevante en significante veranderingen

Randomized clinical trial

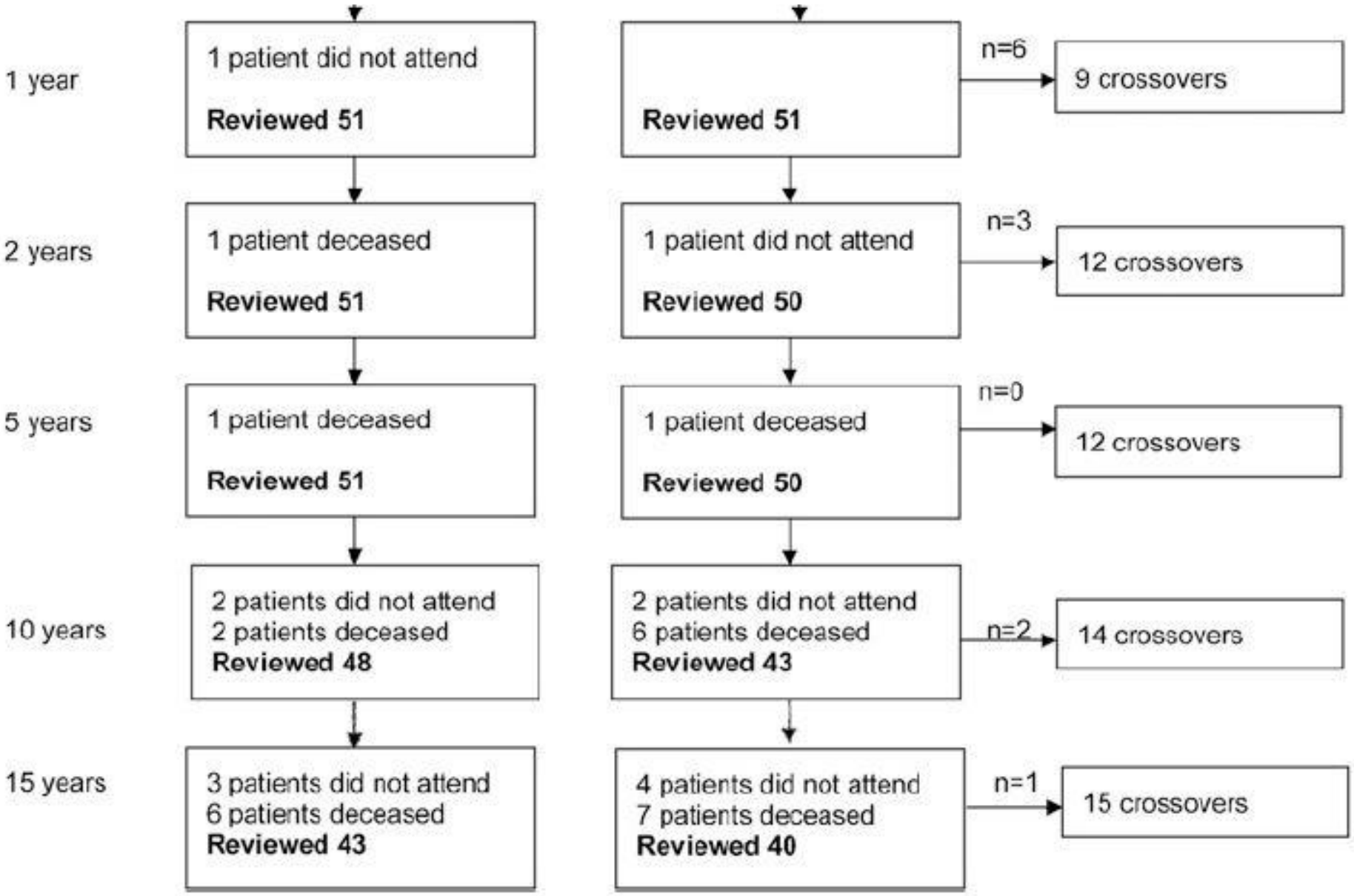
103 patients with full-thickness rotator cuff tears (≤ 3 cm)

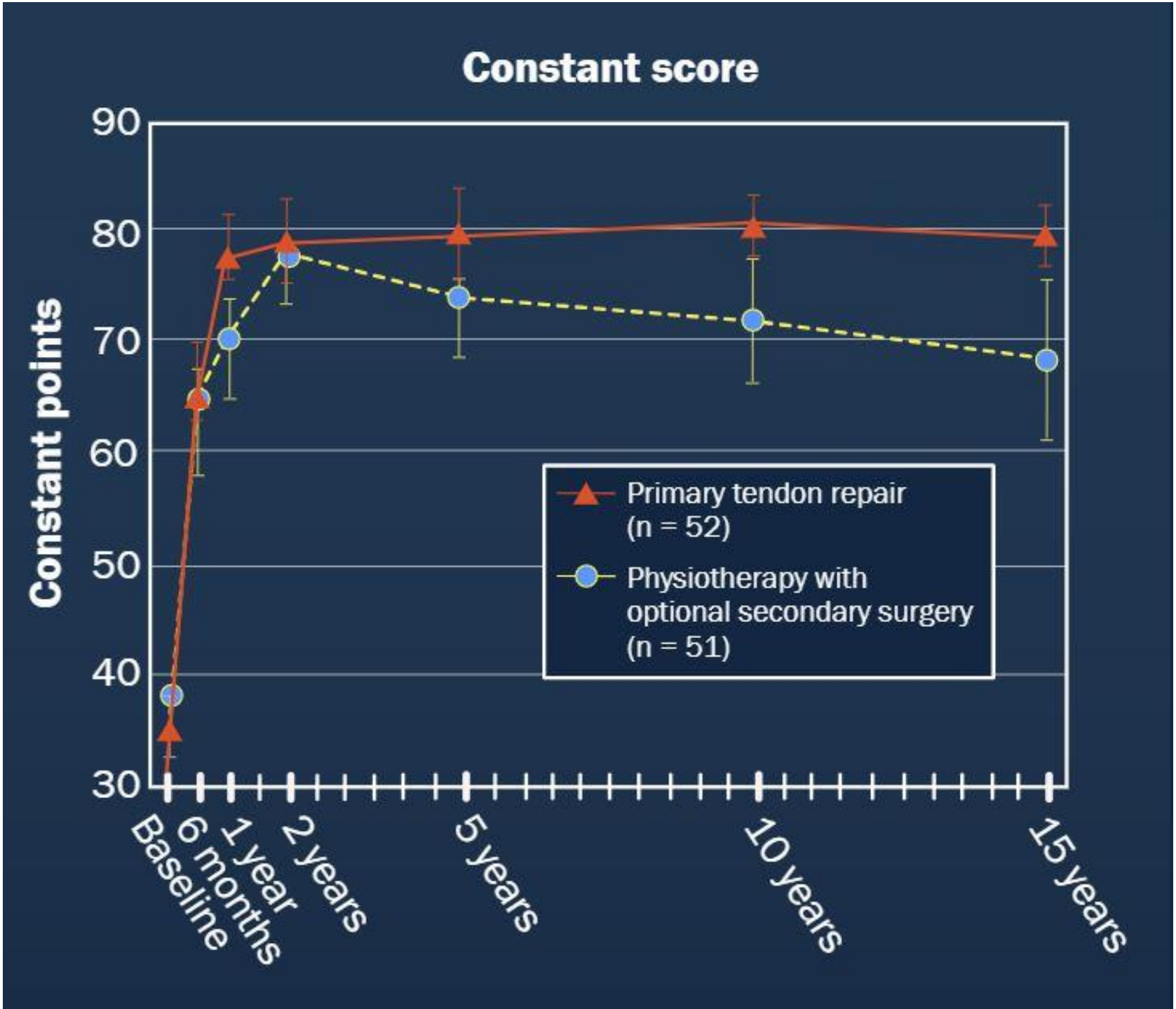
Tendon repair

Physiotherapy
(with optional secondary repair)

Follow-up schedule: Assessment of shoulder function at 6 months, 1 year, 2 years, 5 years, 10 years, and 15 years

(83 of the original 103 patients were available for follow-up at 15 years)


1 year
1 patient did not attend
Reviewed 51
Reviewed 51
n=6
9 crossovers
2 years
1 patient deceased
Reviewed 51
1 patient did not attend
Reviewed 50
n=3
12 crossovers
5 years
1 patient deceased
Reviewed 51
1 patient deceased
Reviewed 50
n=0
12 crossovers
10 years
2 patients did not attend
2 patients deceased
Reviewed 48
2 patients did not attend
6 patients deceased
Reviewed 43
n=2
14 crossovers
15 years
3 patients did not attend
6 patients deceased
Reviewed 43
4 patients did not attend
7 patients deceased
Reviewed 40
n=1
15 crossovers


Constant score
Constant points
90
80
70
60
50
40
30
Primary tendon repair (n = 52)
Physiotherapy with optional secondary surgery (n = 51)
Baseline
6 months
1 year
2 years
5 years
10 years
15 years

Between-group differences at the 15-year follow-up

Constant score

+11.8 points
(p = 0.001)

Pain-free abduction

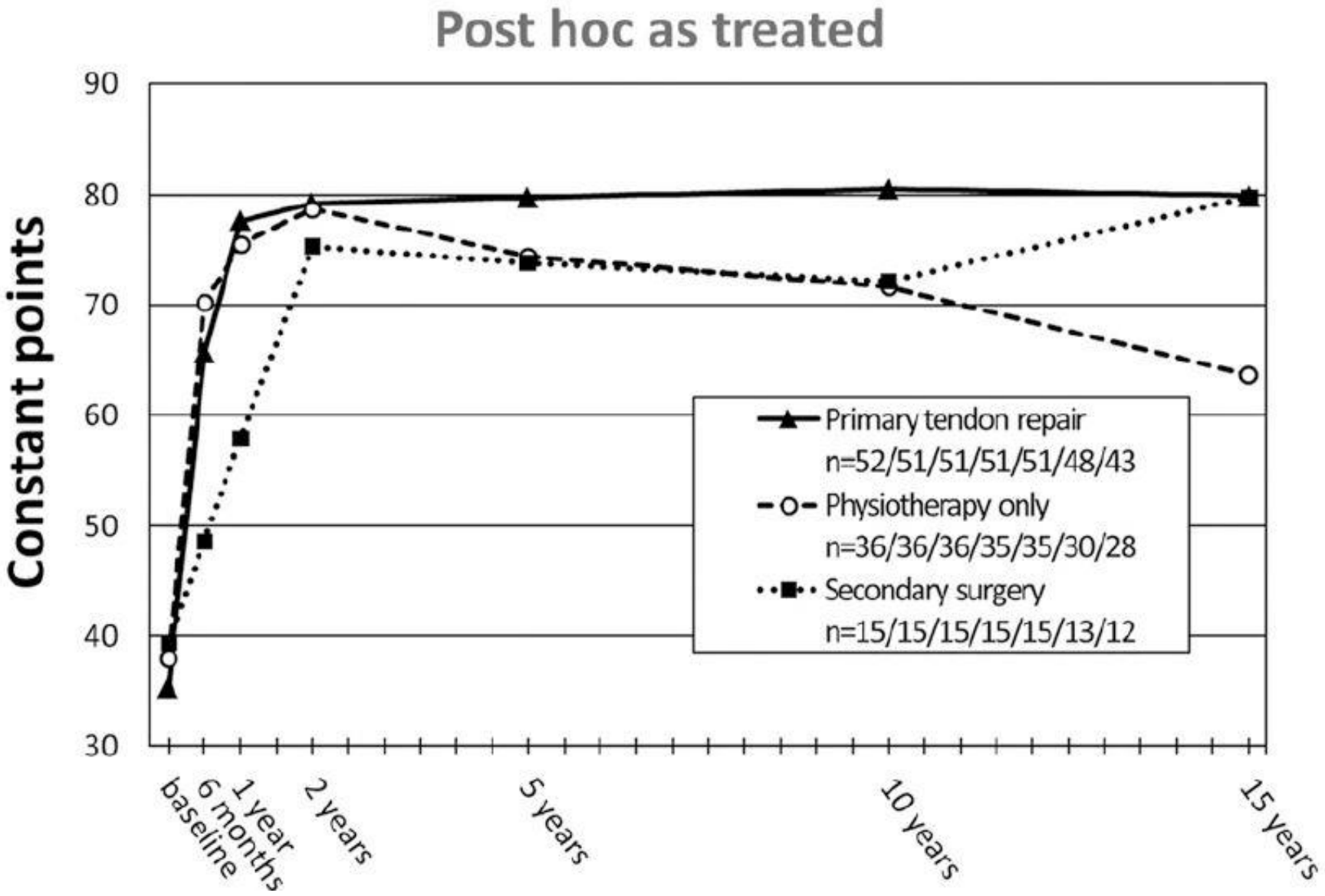
+16.2°
(p = 0.04)

Pain reduction

+1.8 cm on 10-cm visual analog scale
(p < 0.001)

Pain-free flexion

+22.4°
(p = 0.001)



CMs surgery: 79,9; CMs Physio only: 63,4; diff: 16,5

Voorbereiding op vakinhoudelijk deel; zie uitnodiging met 10 vragen.

Aan: SNT leden.
Van: Gerard Koel
Betreft: Mailronde 2025-1 voorafgaand aan de bijeenkomst op 11 maart 2025

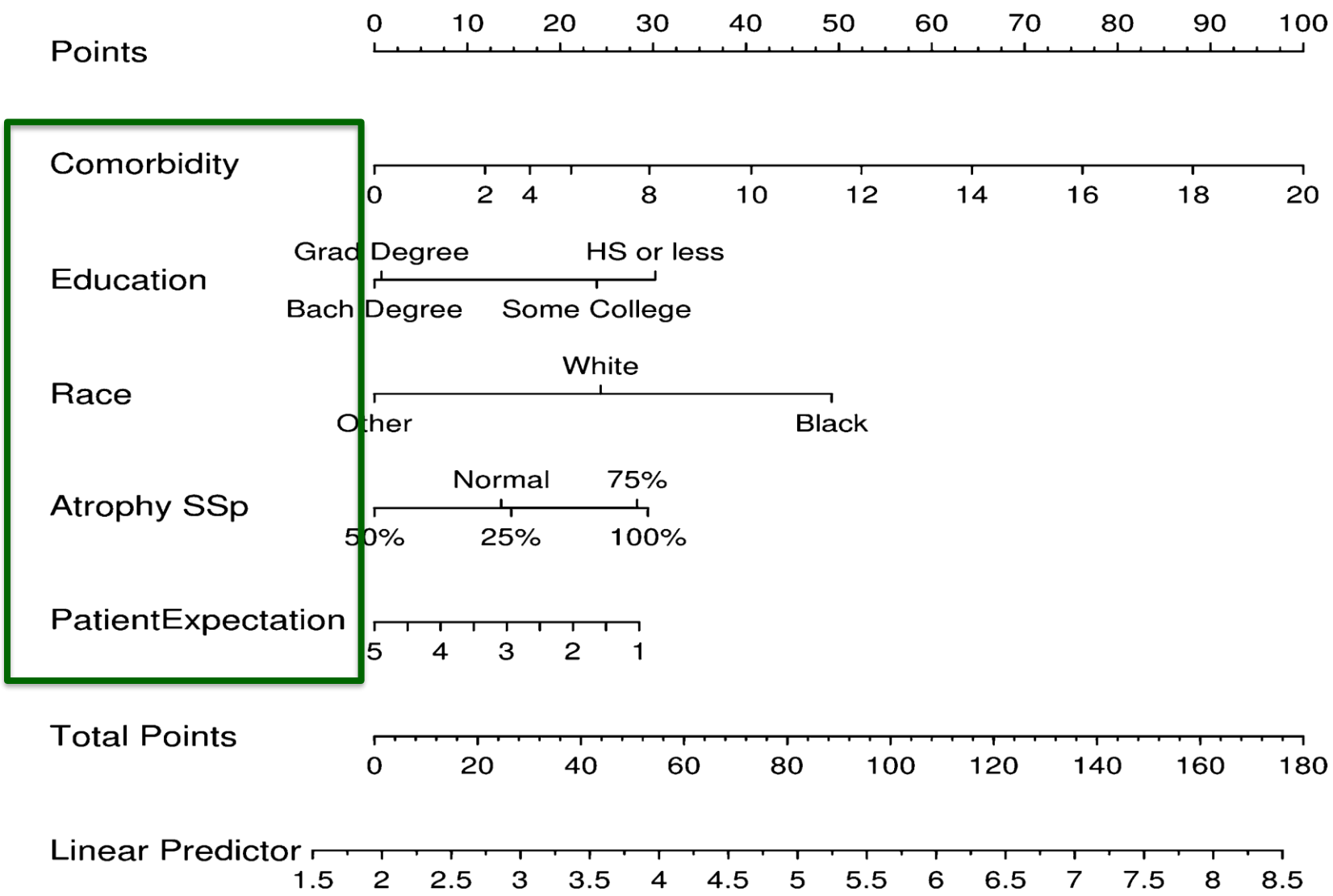
Hengelo, 18-02-2025

Beste SNT-collega.

Op dinsdag 11-03 vindt de SNT-bijeenkomst plaats in Saxion collegezaal F 1.09; ontvangst vanaf 17:30 uur in de hal en programma van 18:00 – 21:00 uur.

Andere studies

- MOON studie; na 2013 (zie slides SCHcombi) nu ook in 2024: 10 jaar resultaten.
- Hill en Keener (2025); beloop RC-schade na opereren vs na fysiotherapie.
- Diverse kosten – effectiviteit studies.
- Gagnier-studie met 5 jaar follow-up.
- ‘Eigen’ response (2025) op Moosmayer .



Vijf factoren die samenhangen met het ontstaan van SchouderPijn bij RC letsels.

Dunn WR, Kuhn JE, Sanders R, An Q, Baumgarten KM, Bishop JY, e.a. Symptoms of pain do not correlate with rotator cuff tear severity: a cross-sectional study of 393 patients with a symptomatic atraumatic full-thickness rotator cuff tear. J Bone Joint Surg Am. 21 mei 2014;96(10):793–800.

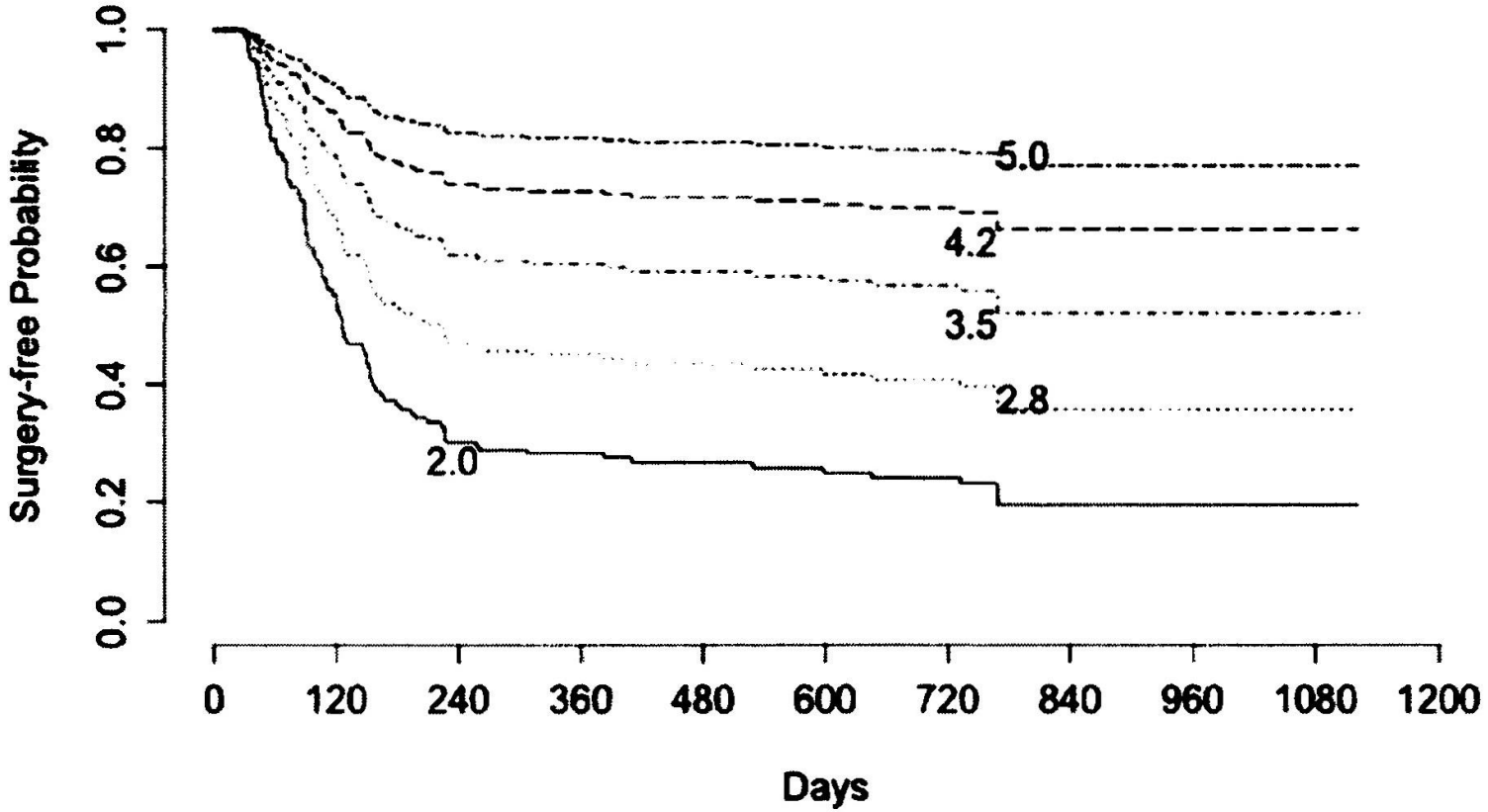


Figure 1 Survival plot of surgery-free probability stratified by patient expectations regarding physical therapy with a 5 indicating high expectations that rehab will lead to improvement, and lower scores indicating lower expectations.

Verwachting patiënt over effectiviteit FT bepaalt de kans op chirurgie!

Kuhn JE, Dunn WR, Sanders R, An Q, Baumgarten KM, Bishop JY, e.a. Effectiveness of physical therapy in treating atraumatic full-thickness rotator cuff tears: a multicenter prospective cohort study. J Shoulder Elbow Surg. oktober 2013;22(10):1371–9.

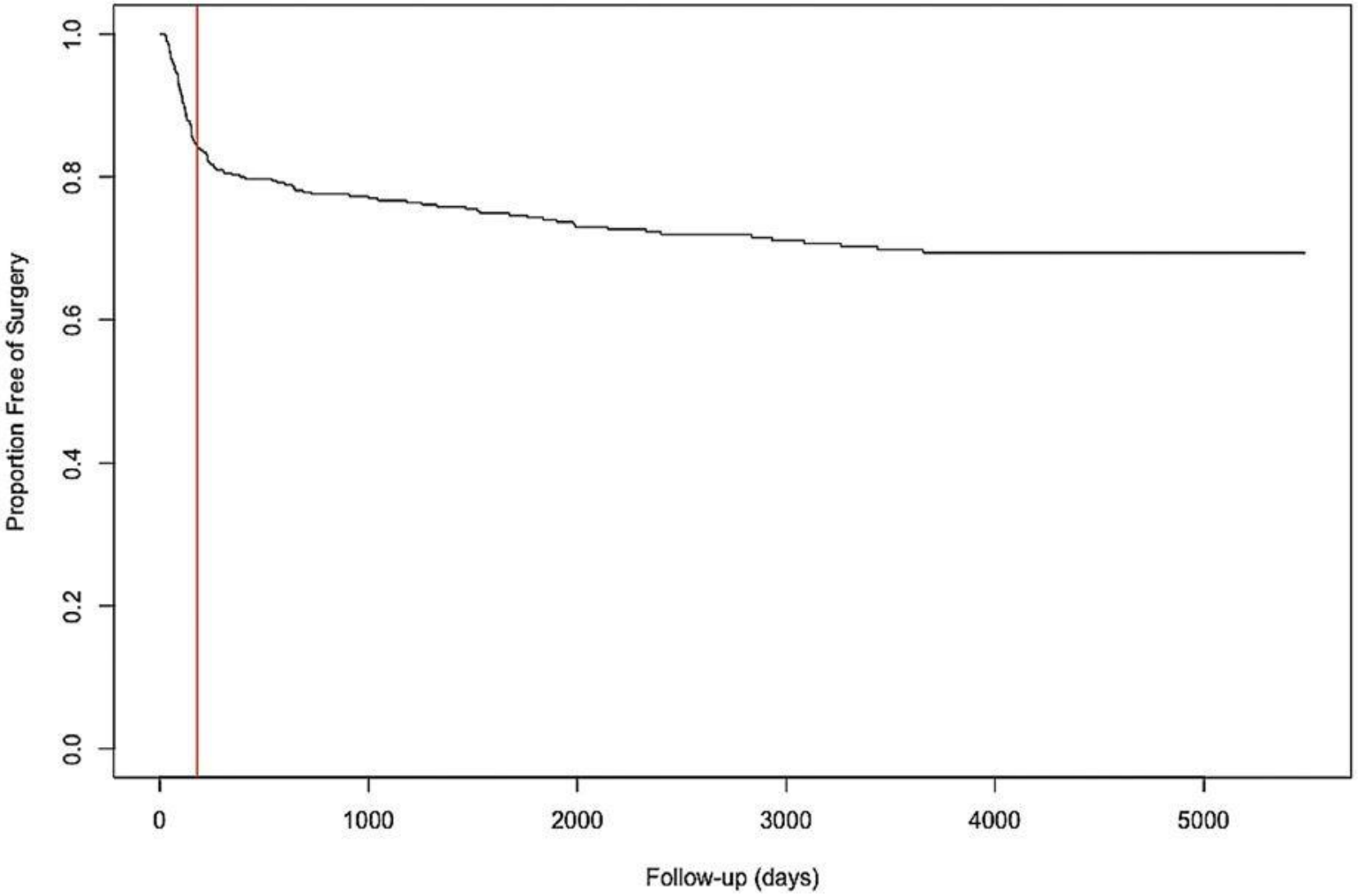
The Predictors of Surgery for Symptomatic, Atraumatic Full-Thickness Rotator Cuff Tears Change Over Time

Ten-Year Outcomes of the MOON Shoulder Prospective Cohort

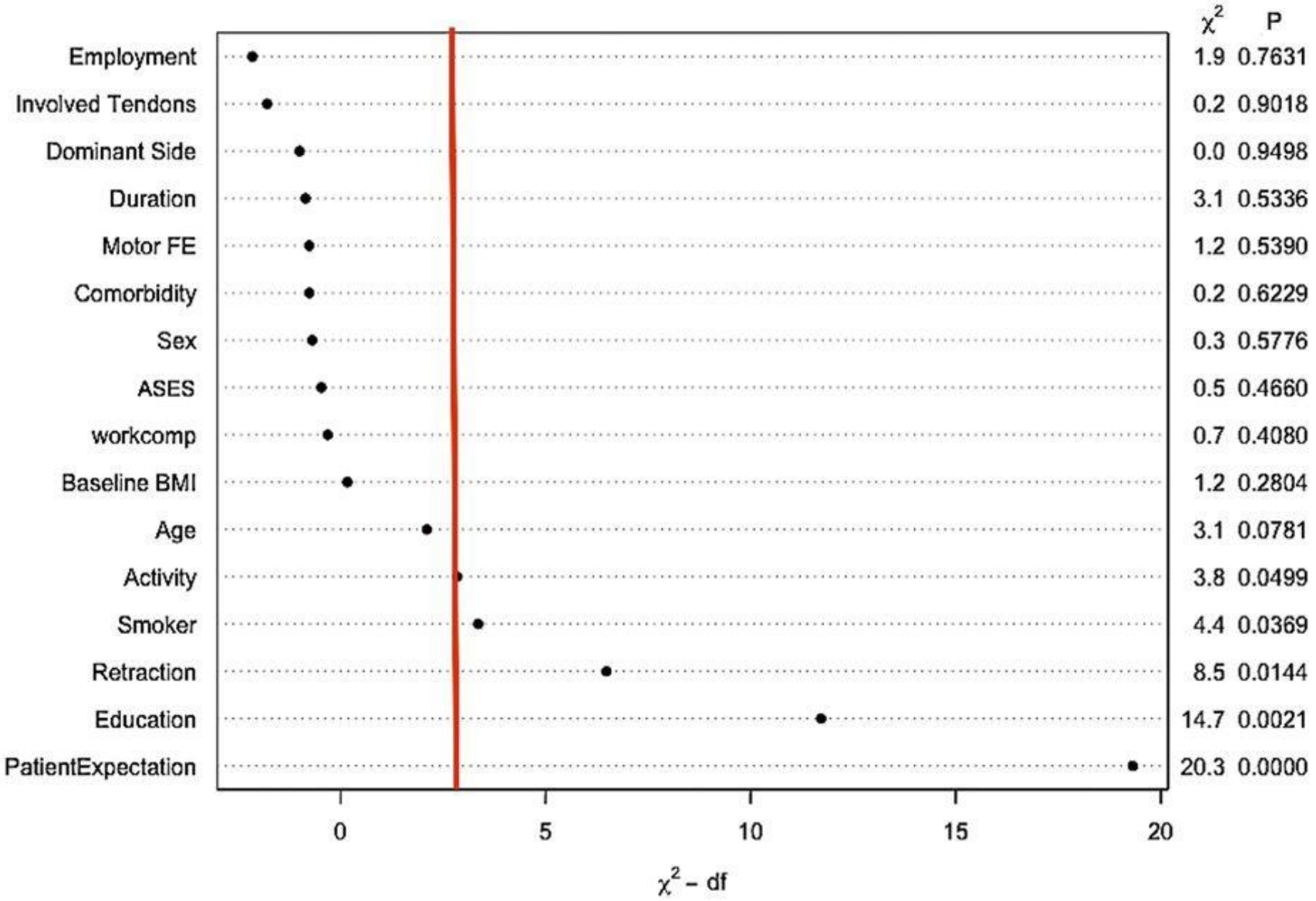
John E. Kuhn, MD, MS, Warren R. Dunn, MD, MPH, Rosemary Sanders, BA, Keith M. Baumgarten, MD, Julie Y. Bishop, MD, Robert H. Brophy, MD, James L. Carey, MD, MPH, Brian G. Holloway, MD, Grant L. Jones, MD, C. Benjamin Ma, MD, Robert G. Marx, MD, MS, Eric C. McCarty, MD, Sourav K. Poddar, MD, Matthew V. Smith, MD, Edwin E. Spencer, MD, Armando F. Vidal, MD, Brian R. Wolf, MD, MS, and Rick W. Wright, MD

Background: A prospective cohort study was conducted to assess the predictors of failure of nonoperative treatment, defined as the patient undergoing surgery for symptomatic, atraumatic full-thickness rotator cuff tears. We present the 10-year follow-up data of this population to determine if predictors for surgery change over time, and secondarily we report the outcomes of the cohort.

Methods: At the time of enrollment, demographic, symptom, rotator cuff anatomy, and patient-reported outcome data were collected in patients with symptomatic, atraumatic full-thickness rotator cuff tears. Patients underwent a standard physical therapy protocol for 6 to 12 weeks. Patient data were then collected at 1, 2, 5, 7, and 10 years. Failure of nonoperative treatment was defined as the patient electing to undergo surgery.



Wisselen naar operatie: vooral in eerste jaar!



Vooral bepaald door PatientExpectation!

Of the 432 patients available for analysis, 37 (9%) died before the end of the 10-year follow-up period and 40 others (9%) were lost to follow-up; thus, a total of 355 patients (82%) were included for the final analyses. Of these, 115 (27%) were known to have undergone surgery at some point during the 10-year follow-up period. Operative details were available for 105 of these patients.

73% tevreden met conservatief beleid.

Durability of Physical Therapy as Assessed with PROMs

Figures 5-A and 5-B depict the effect of physical therapy and the measured PROMs over time. Initially, physical therapy produced significant improvements in PROMs from baseline to 1 year that exceeded the minimal clinically important difference for each PROM. After year 1, no meaningful changes were noted over the 10-year follow-up period for the WORC, ASES, SANE, and Shoulder Activity Scale (Fig. 5-A). Similarly, the VAS pain scores showed statistically significant improvement exceeding the minimal clinically important difference after the physical therapy program and this improvement did not change significantly over the 10-year follow-up period (Fig. 5-B).

Positieve veranderingen zijn stabiel (MOON).

J Shoulder Elbow Surg (2025) 34, 430–440

ELSEVIER

JOURNAL OF SHOULDER AND ELBOW SURGERY

www.elsevier.com/locate/ymse

Does surgical intervention alter the natural history of degenerative rotator cuff tears? Comparative analysis from a prospective longitudinal study

J. Ryan Hill, MD[a,*], Jeffrey J. Olson, MD[b], Julianne A. Sefko, MPH[c], Karen Steger-May, MA[d], Sharlene A. Teefey, MD[e], William D. Middleton, MD[e], Jay D. Keener, MD[c]

Recente studie met + beloop surgery-groep.

Rotator cuff pathology is the most common cause of shoulder pain and represents a substantial health care burden, with a prevalence estimated at approximately 20% in the sixth decade of life, and which increases by 10% each decade thereafter.[47] The natural history of degenerative rotator cuff tears involves a predictable decline characterized by tear enlargement, pain development, and progression of muscle fatty degeneration.[16,25,30,36,48] Pro-

Natuurlijk beloop RC-FTRs;
gemiddeld vs individueel / relatie met functie.

Cost Analysis in Shoulder Surgery

A Systematic Review

Thomas Tischer,*† Prof, MD, MBA, Robert Lenz,† MD, Jochen Breinlinger-O'Reilly,‡ Prof, and Christoph Lutter,† MD, MHBA

Investigation performed at the Department of Orthopaedic Surgery, University Medicine Rostock, Rostock, Germany

Background: Cost analysis studies in medicine were uncommon in the past, but with the rising importance of financial considerations, it has become increasingly important to use available resources most efficiently.

Purpose: To analyze the current state of cost-effectiveness analyses in shoulder surgery.

Clinical Rehabilitation

Sage Journals

The health economic analysis of surgery versus rehabilitation in non-traumatic musculoskeletal shoulder disorders: A SR of trial-based studies

https://doi.org/10.1177/02692155241300121

Conclusion: Priority should be given to interventions that reduce productivity loss and facilitate patients' return to work as soon as possible. There is a definite need for multiplication and standardization of high-quality economic studies (and the trials they are based on) regarding the management of non-traumatic musculoskeletal shoulder disorders.

A 5-Year Follow-up of Patients Treated for Full-Thickness Rotator Cuff Tears

A Prospective Cohort Study

Joel Gagnier,*†‡ ND, PhD, Asheesh Bedi,† MD, James Carpenter,† MD, Christopher Robbins,§ PhD, MPA, and Bruce Miller,† MD, MS

Investigation performed at the University of Michigan, Ann Arbor, Michigan, USA

Background: The evidence in support of operative versus nonoperative management of rotator cuff tears (RCTs) is limited, based primarily on observational studies of lower scientific merit.

Purpose: To (1) compare the efficacy of operative versus nonoperative management of full-thickness RCTs across time and (2) detect variables that predict success within each group.

Study Design: Cohort study; Level of evidence, 2.

The investigators reported that 75% of the patients remained in the nonoperative group at 5 years, 3 patients had subsequent surgery for the tear at 2 to 5 years, and there were no differences in the Rotator Cuff Quality of Life scores between operative and nonoperative groups at 5 years. No predictive modeling was done in the latter study.

75% van de RCRSP patiënten met FTR is, ook op termijn (5 – 15 jaar) tevreden met fysio.

extended conservative management. In a number-needed-to-treat analysis, Moosmayer et al estimated that 3.5 patients would need to be treated with surgical repair instead of physical therapy to achieve 1 additional good-to-excellent long-term result.[28] Considering the low risk of rotator cuff repair surgery and the potential quality-of-life benefits for a highly prevalent condition, this concept warrants consideration.

NNT Number Needed to Treat;
hoeveel patiënten opereren voor 1 goed resultaat.

remain a potentially confounding variable. Another limitation is the fact that the conservative treatment/rehabilitation protocol for the painful shoulders of the study and control groups was not standardized. However, all subjects in the study group failed a course of nonoperative treatment that included physical therapy and all painful control shoulders were also managed with a period of physical therapy. Finally, the treat-

Uit Hill/ Keener studie 2025:
dat moet onze SNT-drijfveer zijn!

Moosmayer, S. et al.
Fifteen-Year Results of a Comparative Analysis of Tendon Repair Versus Physiotherapy for Small-to-Medium-Sized Rotator Cuff Tears
http://dx.doi.org/10.2106/JBJS.24.00065

February 26, 2025

Therapy for RCRSP-patients with symptomatic small-to-medium-sized Rotator Cuff tears; surgery for all?

Gerard Koel
Physical Therapist, MSc Epidemiologist
Shoulder Network Netherlands

Other Contributors:

Bart-Jan Veen
Orthopedic Surgeon, PhD
Medical Spectrum Twente, Enschede

	Tends to surgery	Tends to physiotherapy
Type of FTR RC-tear	Acute/ traumatic	Acute on chronic, non-traumatic
Age of the patient	Younger	Older
Shoulder demands	High shoulder demands	Not high shoulder demands
Muscle strength	Clearly reduced, not trainable	(Slightly) reduced, but trainable
Inner active ROM	Active external rotation OK	Active external rotation ↓
Location of RC-tear	Tendon subscapularis is involved	Tendon subscapularis not involved
Course of the FTR	Tear size is increasing	Tear size has a stable size
Observation from dorsal	Visible atrophy SS/ IS	No visible atrophy SS/ IS
Bio-Psycho-Social model	Dominant somatic factors	Dominant non-somatic factors
Mental dysfunctions	Self-confidence, resilience, fear: OK	Self-confidence, resilience, fear: ↓
Cognitive dysfunctions	Expectation and perception: OK	Expectation and perception: ↓

Table 1. Clinical decision factors (signs and symptoms) for clinicians to choose optimal treatment strategy for SP-patients with small and medium-sized FTRS.

SchouderNetwerken Nederland

Een patiënt met SP

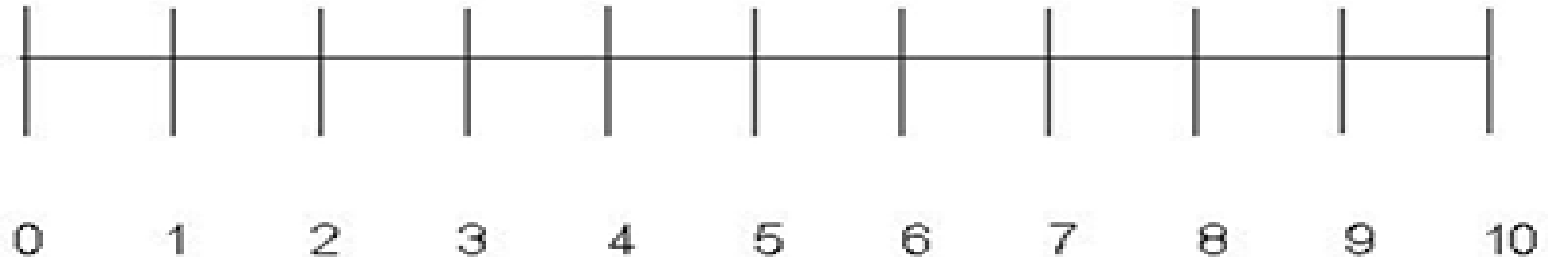
- 52 jaar, man; eigenaar schildersbedrijf
- Komt via DTF met SAPS/ RCRSP beeld
- Klachten aan dominante zijde
- Pijn en verminderde kracht abductie
- MSU: sprake van een kleine FTR in SS

SchouderNetwerken Nederland

Een patiënt met SP & nieuwe (prognostische?) factoren; vind jij dat die factoren invloed hebben op jouw klinische beslissing:

- consult orthopeed gewenst; of:
- betreft SP-patiënt voor fysio?

Per (prognostische?) factor >>>
scoren via MENTI op een 11 punt schaal.



0 – 1	***5***	***9 – 10***
Max. orthopeed	***Neutraal***	***Max. fysio***

SchouderNetwerken Nederland

Mogelijk relevante factoren

1. Zichtbare atrofie dorsale zijde.
2. PSEQ-score van 25 punten (lage zelfredzaamheid)
3. Leeftijd
4. Locatie MSU: blijkt letsel subscap te zijn
5. Mentaal: bang/ - verwachting voor operatie (vv)
6. Heeft comorbiditeit: DM
7. Positieve MWM/ SSMP actieve elevatie 3 kilo
8. MSU: schade ventrale insertie Rotator Cable
9. MSU: diameter van FTR neemt toe
10. Actieve inner-ROM exorotatie is beperkt

MENTI openen

Mentimeter

- Ga naar www.menti.com
- Vul in: **6227 0615**

Mentimeter

SchouderNetwerken Nederland

Enter the code to join

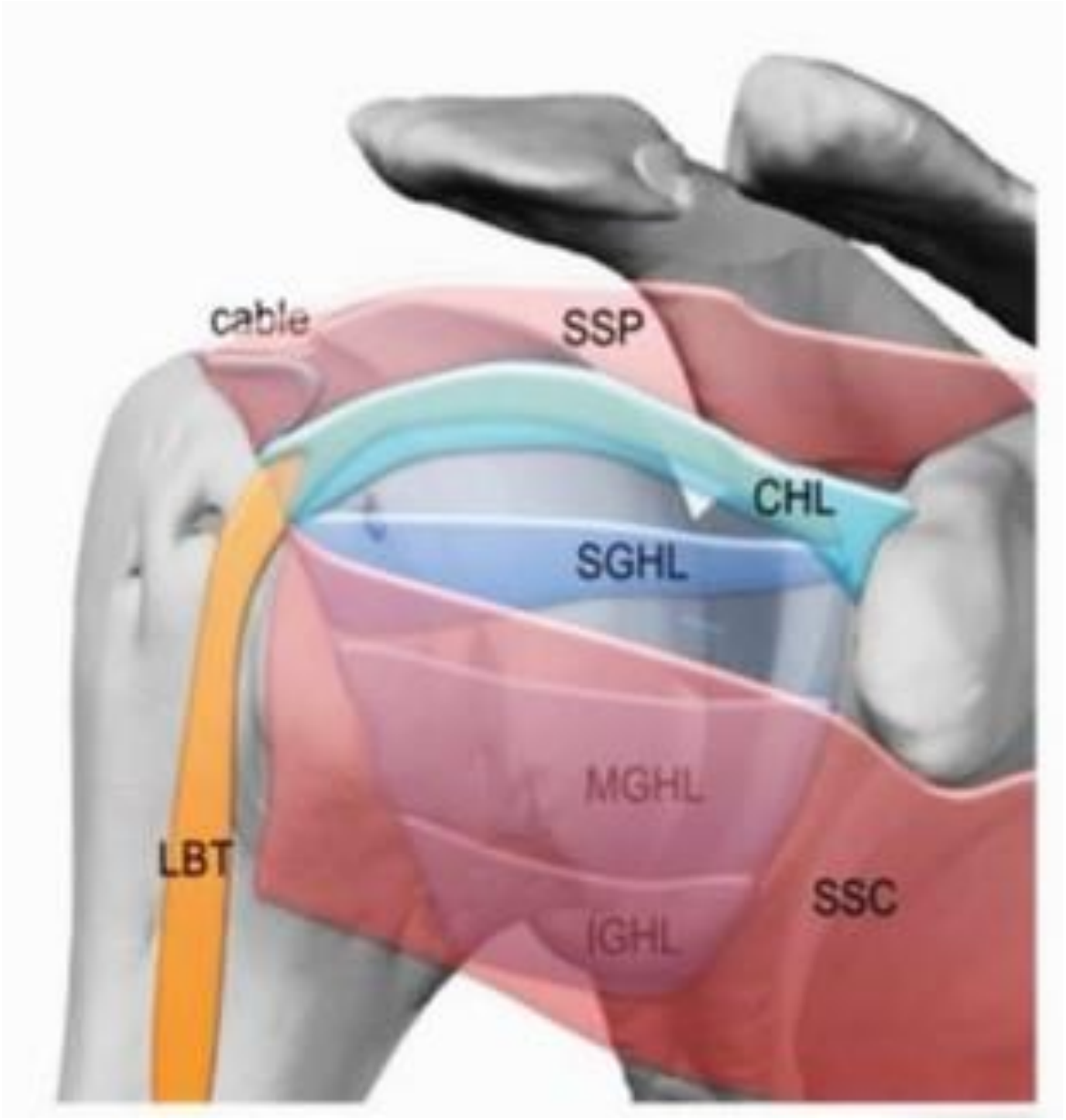
It's on the screen in front of you

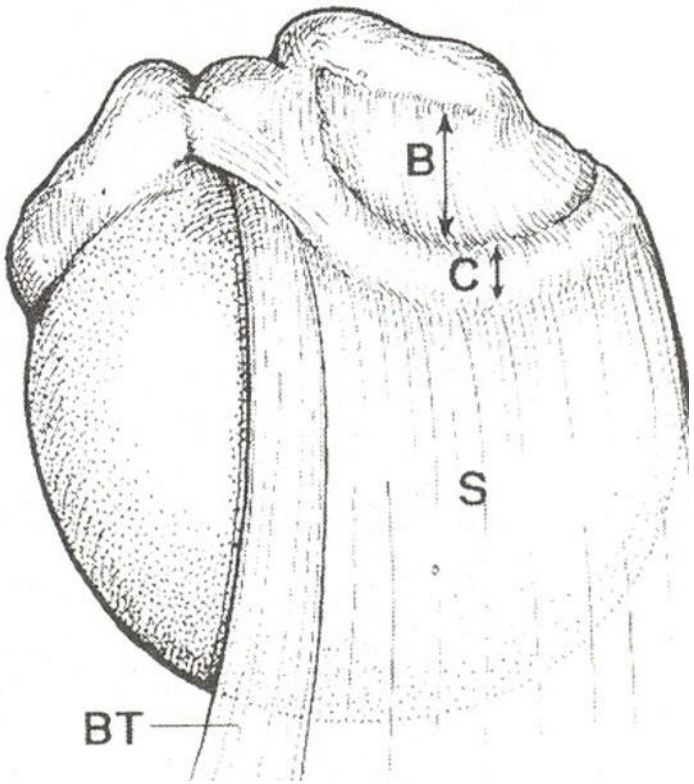
6227 0615

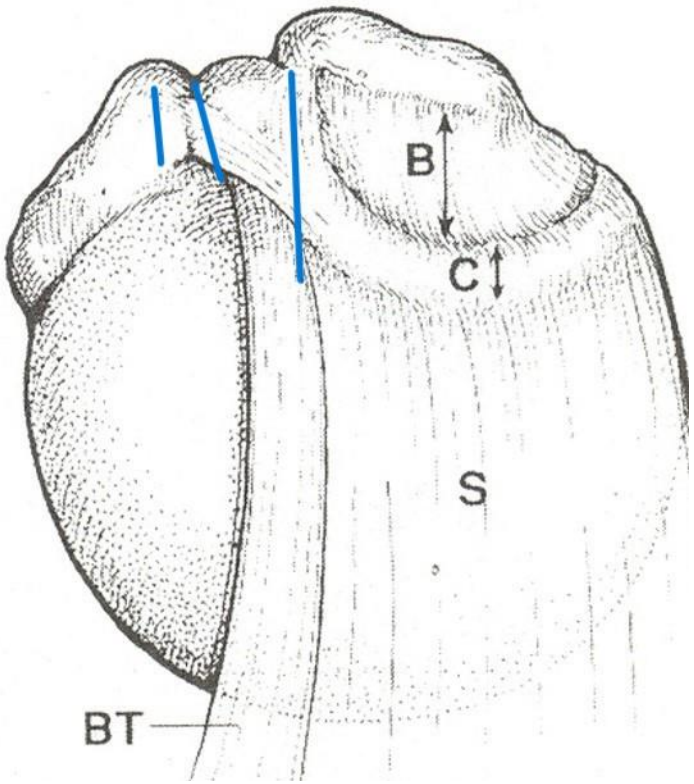
Join

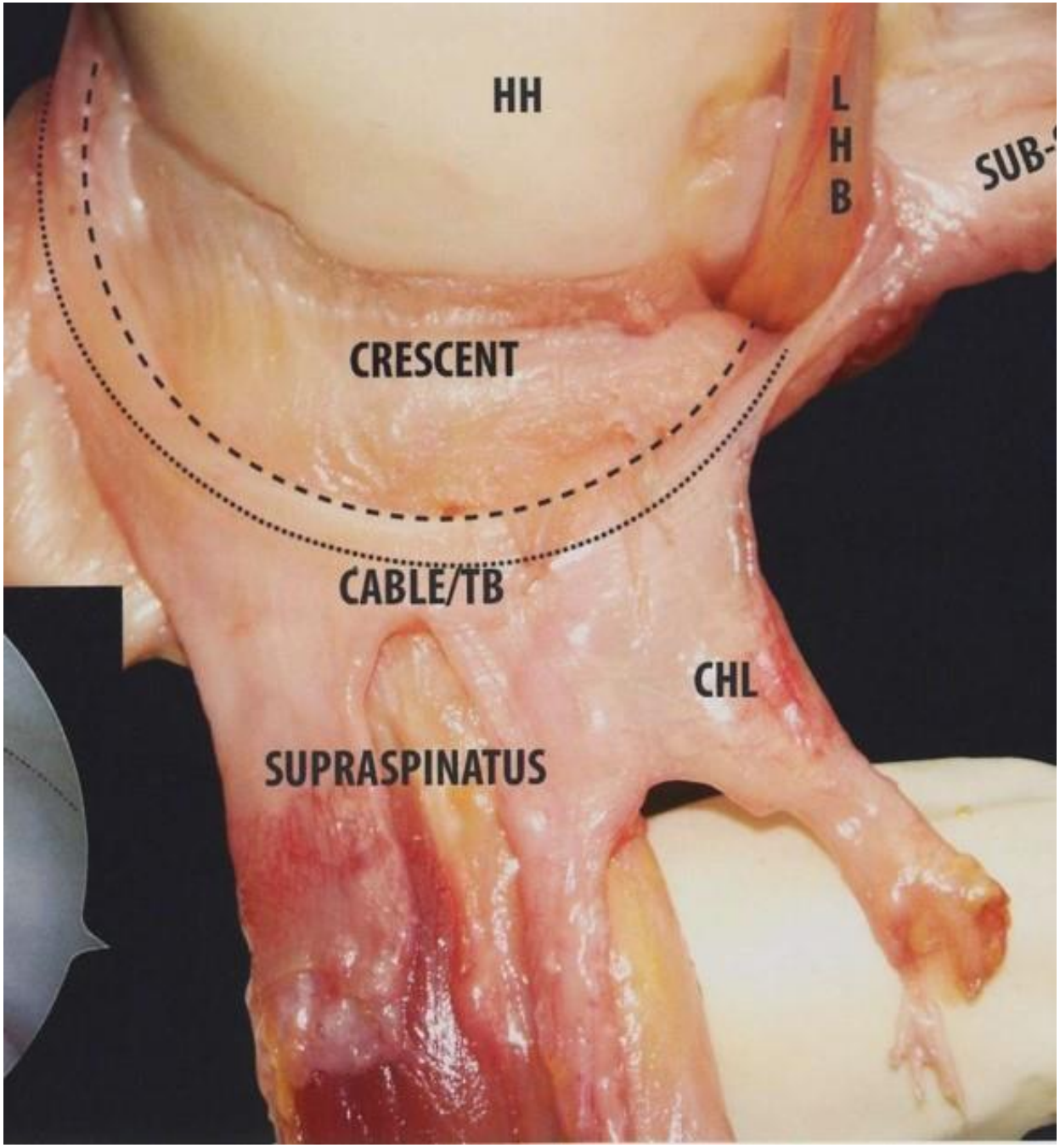
Kies 'jouw' score tussen 0 en 10
Druk daarna op 'submit'


CIAT


cable
SSP
CHL
SGHL
MGHL
LBT
SSC
IGHL


B
C
S
BT


B
C
S
BT


HH
LHB
SUB-
CRESCENT
CABLE/TB
CHL
SUPRASPINATUS

Bedankt voor je komst & participatie.

Volgende online SNT bijeenkomst op 3 juni 2025

Daarna congres op 18 en 19 september in Rotterdam