Reproducibility and responsiveness of the Scapula Position Test (SPT) and the WORC, WOSI and WOOS questionnaires in patients with shoulder symptoms

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To determine the reproducibility and responsiveness of the Scapula Position Test and the WORC, WOSI and WOOS questionnaires in patients with shoulder symptoms.

Ethical review	Approved WMO
Status	Recruiting
Health condition type	Tendon, ligament and cartilage disorders
Study type	Observational non invasive

Summary

ID

NL-OMON35357

Source
ToetsingOnline

Brief title
Quality of the SPT and the WORC, WOSI and WOOS

Condition

- Tendon, ligament and cartilage disorders

Synonym
shoulder instability; tendon rupture

Research involving
Human

Sponsors and support

Primary sponsor: Vrije Universiteit Medisch Centrum
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: functional testing, questionnaires, reproducibility, shoulder

Outcome measures

Primary outcome

Outcome of the scapular position test (3 positions in centimeters, one position

in degrees).

Outcome of the WORC (0-2100 points)

Outcome of the WOSI (0-2100 points)

Outcome of the WOOS (0-1900 points)

Secondary outcome

not applicable

Study description

Background summary

At the VU medical centre a postoperative shoulder rehabilitation guideline has been developed regarding 4 types of shoulder surgeries.

* stabilizing shoulder operations e.g. Bankart repair or capsular shift
* rotator cuff repair
* acromion arthroplasty or lateral clavicula resection
* hemi- or total glenohumeral arthroplasty

To provide high-quality rehabilitation, the instruments used need to be of high psychometric quality. Additionally, these instruments should cover all domains of the International Classification of Function (ICF, 2001).

The training of scapular stability is regularly applied. Therefore, there is a need for a clinical diagnostic and evaluating instrument to measure scapular function. Burkhart (Burkhart, 2003) describes within *the scapular rating scale* a classification of 3 scapular malpositions. This provides a practical clinical instrument to diagnose the function of the scapula. However, no psychometric qualities of this specific *scapula position test* have been

described.

Furthermore, there is a need for disease specific questionnaires. The University of Western Ontario in Canada developed 3 disease specific questionnaires, the so called *Shoulder Index Questionnaires*. One questionnaire for rotator cuff diseases (WORC), one for shoulder instability (WOSI) and one for shoulder osteoarthritis (WOOS). Each of these questionnaires demonstrate good psychometric qualities. However, there is no Dutch language version available.

Study objective

To determine the reproducibility and responsiveness of the Scapula Position Test and the WORC, WOSI and WOOS questionnaires in patients with shoulder symptoms.

Study design

150 patients are included in this study and examined at 3 different timepoints, 2 measurements pre-operatively and 1 measurement post-operatively. Every measurement session takes 15 minutes. Two independent raters score the scapular position test. Finally the disease specific questionniare (WORC, WOSI or WOOS) is filled out by the patient.

The inter-rater and intra-rater reliability of these instruments is determined by calculating the Interclass Correlation Coefficient (ICC). Absolute agreement ICC*s and minimal detectable differences (MDD) will be calculated (two way mixed model with measures of absolute agreement). Responisveness is determined by calculating Guyatt*s responsiveness ratio. Additionally, to assess responsiveness ROC curves will be made.

Study burden and risks

not applicable (the scapula is observed and the position is recorded). Filling in a questionnaire does not give any risk.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

Patients with one of the following shoulder problems:
1) osteoartritis
2) rotator cuff ruptures
3) luxation of glenohumeral joint

Exclusion criteria

1) extreme pain
2) insufficient control of Dutch language
3) optimal strength and mobility of shoulder region
3) tumor, infection or fracture in shoulder region
4) neurologic disorder (peripheric or central)

Study design

Design

Study type: Observational non invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Other

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	03-06-2009
Enrollment:	150
Type:	Actual

Ethics review

Approved WMO Date:	22-01-2009
Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO Date:	09-02-2011
Application type:	Amendment
Review commission:	METC Amsterdam UMC

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL24253.029.08