# **Humeral Head Centralization Test-study**

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

# **Summary**

## ID

NL-OMON21609

Source NTR

Brief title HHC Test-study

#### Health condition

Recurrent antero-inferior shoulder instability

## **Sponsors and support**

**Primary sponsor:** OLVG **Source(s) of monetary or material Support:** KNGF; 1500,- Euro

Intervention

### **Outcome measures**

#### **Primary outcome**

Evaluate the glenohumeral joint translation in the instable shoulder of a patient compared with the stable shoulder of a healthy control group during external rotation of the shoulder.

#### Secondary outcome

Evaluate the glenohumeral joint translation in the instable shoulder of a patient compared with the stable shoulder of a healthy control group during extension of the arm.

1 - Humeral Head Centralization Test-study 6-05-2025

Evaluate the inter-rater and intra-rater reliability of the ultrasound guided HHC test. Evaluate the subjective function and stability of the affected shoulder. Evaluate the objective stability of the affected shoulder. Evaluate the association between the results of the apprehension test and HHC test. Evaluate the effect of twelve weeks of motor control training on the subjective function and

the joint translation during external rotation of the shoulder.

# **Study description**

#### **Background summary**

The study is a prospective single-center trial, performed in a medical center. 25 patients with recurrent antero-inferior shoulder instability and 25 healthy control subjects will be included. The experimental group will first complete the OSIS and the WOSI whereafter they undergo a physical-and ultrasound examination of the affected shoulder. After one week the ultra-sound examination is repeated by a physical therapist and a radiologist and the patient receives a 12 week home based exercise program. After 12 weeks a final ultrasound examination is performed and the OSIS and WOSI are again completed. The control group will only receive one ultrasound examination of the shoulder.

#### **Study objective**

We hypothesize that there will be a significant difference in anterior translation of the humeral head between patients and healthy objects. Secondly we hypothesize that the interand intra-rater reliability of the HHC test will be fair to good. Finally we hypothesize that 12 weeks of motor control training will significantly improve the function of the shoulder.

#### Study design

Week 1; initial physical examination including first ultrasound examination, Week 2; second and third ultrasound examination, together with introduction to the 12 week home based exercise program. Week 14; final ultrasound examination.

#### Intervention

12 week home based exercise program.

# Contacts

**Public** OLVG, department of radiology

2 - Humeral Head Centralization Test-study 6-05-2025

Marianne Larsen van Gastel

0031(0)20 599 91 11 Scientific OLVG, department of radiology Marianne Larsen van Gastel

0031(0)20 599 91 11

# **Eligibility criteria**

### **Inclusion criteria**

In order to be eligible to participate in this study, a patient must meet all of the following criteria: Patients 18 years or older, having had two or more involuntary redislocations or subluxations caused by an initial traumatic event.

The subjects of the healthy control group must meet all of the following criteria: a subject must be 18 years or older, experiencing no complaints of the shoulder.

Patients need to be able to read and write in Dutch or English language in order to complete the questionnaires, and sign informed consent.

### **Exclusion criteria**

A potential eligible patient or subject of the healthy control group who meets any of the following criteria will be excluded from participation in this study: Patients with posterior or multidirectional instability (antero-, inferior- and posterior instability). Patients with atraumatic instability or generalized hyperlaxity (Beighton score >6 points). Patients who sustained a neurological condition or a bony lesion (As assessed on conventional radiographs) during dislocation. Patients with previous stabilizing surgery of the affected shoulder.

# Study design

### Design

Study type:
Intervention model:
Allocation:

Interventional Other Non controlled trial

3 - Humeral Head Centralization Test-study 6-05-2025

Masking:	Open (masking not used)
Control:	N/A , unknown

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	01-02-2021
Enrollment:	50
Туре:	Anticipated

## **IPD** sharing statement

Plan to share IPD: Undecided

# **Ethics review**

Positive opinion	
Date:	15-01-2021
Application type:	First submission

# **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** NTR-new Other **ID** NL9202 MEC-U : R19.058

# **Study results**