# Manipulation under anesthesia versus conservative treatment in stage two of a frozen shoulder: a randomized controlled trial

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We hypothesize that the course of the disease can be shortened with MUA with a quicker functional recovery and gain in range of motion and a subsequent faster return to work compared to conservative treatment.

Ethische beoordeling	Positief advies
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

# Samenvatting

### ID

NL-OMON21101

Bron NTR

Verkorte titel ConDoor - trial

#### Aandoening

Frozen shoulder, adhesive capsulitis

### Ondersteuning

Primaire sponsor: none Overige ondersteuning: none

### **Onderzoeksproduct en/of interventie**

### Uitkomstmaten

#### Primaire uitkomstmaten

SPADI

# **Toelichting onderzoek**

#### Achtergrond van het onderzoek

Rationale: Frozen shoulder (adhesive capsulitis) is a common cause of shoulder pain and affects

approximately 2-4% of the general population. Idiopathic frozen shoulder is characterised by a

spontaneous onset of pain and stiffness of the shoulder, especially a loss in external rotation,

without a prior traumatic event. It is considered to be a self -limiting condition with a variable

duration of 1-3 years. However, this is a prolonged period with a considerable amount of pain and

disability in daily life. Traditionally, manipulation under anaesthesia is a well-established treatment

procedure for a frozen shoulder if conservative treatment fails. However, it is also a controversial

procedure because it might lead to complications as a fracture, dislocation or intra-articular injury.

The reported complication rate of manipulation under anaesthesia of 0.5% is rather low.

Nevertheless, we hypothesize that the course of the disease can be shortened with manipulation

under anaesthesia, potentially leading to a quicker functional recovery and gain in range of motion

compared to conservative treatment.

Objective: The current study aims to evaluate the difference in functional outcome, measured

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by the

SPADI, and the duration of symptoms, after treatment of a frozen shoulder with or without

manipulation under anaesthesia.

Study design: Randomized controlled trial

Study population: Adult patients with clinical signs and symptoms of a frozen shoulder in phase 2

presenting to the outpatient clinic of the department of orthopaedic surgery of the participating

hospital.

Intervention: Manipulation under anaesthesia

Main study parameters/endpoints: Primary outcome: Function, measured by the SPADI

Secondary outcomes: Function, measured by the oxford shoulder score (OSS). Pain at rest and during

activity (Numeric Pain Rating Scale). General health related quality of life (EQ-5D), Range of motion

(ROM), ability to work (Single item work ability Index, WORQ-UP in Dutch and Absenteeism past

month. Usage of analgesics. Number of repeated corticosteroid infiltrations.

Nature and extent of the burden and risks associated with participation, benefit and group

relatedness: Subjective scores to fill out, and an increased number of(non-invasive) measurements of

the function of the shoulder. Follow up consists of three moments at 1 month, 3 months and 1 year.

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The benefit of the study is to provide an answer to the question if manipulation under anaesthesia

can indeed shorten the duration of symptoms and the advantages outweigh the possible

disadvantages. There is a minimal combined risk of approximately 0.5% during the manipulation.

possible complications of manipulation under anesthesia are: fracture, glenohumeral dislocation and

brachial plexus traction injury. Another risk is an overtreatment of patients with a mild / relatively

quick self-limiting natural course of the frozen shoulder.

#### Doel van het onderzoek

We hypothesize that the course of the disease can be shortened with MUA with a quicker functional recovery and gain in range of motion and a subsequent faster return to work compared to conservative treatment.

#### Onderzoeksopzet

1, 3 months and 1 year

#### **Onderzoeksproduct en/of interventie**

Manipulation under anesthesia +

Physiotherapy

# Contactpersonen

### **Publiek**

Amphia ziekenhuis

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### Wetenschappelijk

Amphia ziekenhuis

Bertram The Breda The Netherlands Tel: 076-5953080

### **Deelname eisen**

### Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

This study focusses on patients with a clinical diagnosis of a stage two FS. This is defined as symptoms of pain and stiffness, predominantly in one shoulder, persisting  $\geq$  3 months, without preliminary trauma which led to an anatomic abnormality. Characteristically, the pain is most severe at the end of the range of motion. Pain must be diminished compared to the maximum amount of pain in stage one of the condition.

In order to be eligible to participate in this trial, patients must meet all of the following criteria:

- Age [] 18 years and  $\leq$  70 years

- Restriction of passive motion in the glenohumeral joint of  $\geq$  30° in external rotation and at least a second plane of movement with  $\geq$  30° restriction (compared to the contra-lateral side)

- Unsuccessful conservative therapy within the previous 3 months

### Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

If any of the following criteria will apply, patients will be excluded from participation:

- Numeric Pain Rating Scale at rest  $\geq$  7
- Onset of symptoms  $\geq$  1 year ago
- Osteoarthritis of the glenohumeral joint, Kellgren-Lawrence osteoarthritis grading scale  $\geq 2$
- Previous surgery to the shoulder
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- Systemic inflammatory joint disease
- Evidence of a complete rotator cuff tear on physical examination, ultrasound images or MRI
- Neurological disorders of the upper limb
- Therapeutic anticoagulation which can not be interrupted without bridging therapy
- Other known shoulder pathology such as infection or tumor
- Contra-indication to corticosteroid injection, allergy to contrast or local anaesthetic
- Inability to give informed consent and fill out questionnaires

# Onderzoeksopzet

### Opzet

Туре:	Interventie onderzoek	
Onderzoeksmodel:	Parallel	
Toewijzing:	Gerandomiseerd	
Blindering:	Open / niet geblindeerd	
Controle:	Geneesmiddel	
Deelname		
Nederland		
Nederland Status:	Werving nog niet gestart	
	Werving nog niet gestart 01-07-2017	
Status:		

# **Ethische beoordeling**

Positief advies
Datum:
Soort:

15-01-2017 Eerste indiening

# Registraties

### **Opgevolgd door onderstaande (mogelijk meer actuele) registratie**

Geen registraties gevonden.

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

### In overige registers

Register	ID
NTR-new	NL6043
NTR-old	NTR6182
ССМО	NL.56143.101.16

### Resultaten