# De waarde van echo en MRI bij de evaluatie van gewrichtsschade bij hemofilie

No registrations found.

**Ethical review** Positive opinion **Status** Recruitment stopped

Health condition type -

**Study type** Observational non invasive

## **Summary**

### ID

NL-OMON24318

#### **Source**

Nationaal Trial Register

#### **Health condition**

haemophilia, arthropathy, joint damage

## **Sponsors and support**

**Primary sponsor:** University Medical Center Utrecht

Source(s) of monetary or material Support: Unrestricted research grant by Baxter

#### Intervention

#### **Outcome measures**

### **Primary outcome**

Diagnostic accuracy of ultrasound assessment of the synovium in haemophilic arthropathy compared to MRI

### **Secondary outcome**

- \* Association of soft tissue changes on initial MRI with osteochondral changes on re-
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\* Reversibility of intra-articular haemosiderin

## **Study description**

### **Background summary**

Repeated provoked or spontaneous bleeding into the joints are the hallmark of haemophilia. From a clinical perspective, it is important to assess early, potentially reversible, joint changes in patients with normal findings on physical examination and X-rays. Consequently there is an increasing interest in the use of Magnetic Resonance Imaging (MRI) and ultrasound. So far, there is no literature available about the diagnostic accuracy of a recently developed, simple and fast, ultrasound protocol. Besides, the clinical relevance of early changes detected by MRI and ultrasound is still unclear. It is not known if subtle alterations such as haemosiderin and synovial hypertrophy seen on MRI are reversible or not, and if they have a predictive value for development of osteochondral changes.

The primary objective of this study is to establish the diagnostic accuracy of ultrasound assessment of the synovium in haemophilic arthropathy compared to MRI. Secondary objectives are to determine whether or not synovial hypertrophy on MRI is able to predict osteochondral changes on MRI five years later and to evaluate if intra-articular haemosiderin can be cleared in five years.

## **Study objective**

- The diagnostic accuracy of ultrasound assessment regarding the synovium in patients with haemophilia is > 70%.
- Soft tissue changes on initial MRI are associated with osteochondral changes on reexamination after 5 years, independent of bleeding-history in patients with haemophilia.
- Haemosiderin on MRI could be cleared five years later in joints of haemophilic patients without new joint bleeds

### Study design

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### Intervention

Diagnostic procedures:

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- \* Ultrasound assessment of knees and ankles
- \* MRI assessment of knees and ankles

## **Contacts**

#### **Public**

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## **Eligibility criteria**

### Inclusion criteria

- \* Aged 18-32 year
- \* Clinical and radiological absent or minimal arthropathy
- \* Severe (<1% FVIII/IX activity) or moderate haemophilia (1-5% FVIII/IX activity)
- (\* MRI assessment of both knees and ankles by the standardized MRI protocol in 2009/2010)

## **Exclusion criteria**

- \* History of inhibitors
- \* Contra indication for MRI
- \* Exclusion of joints in case of a severe joint injury, joint surgery, or development of a target joint since initial MRI assessment in 2009/2010
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## Study design

## **Design**

Study type: Observational non invasive

Intervention model: Other

Allocation: Non controlled trial

Masking: Single blinded (masking used)

Control: N/A, unknown

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 01-08-2014

Enrollment: 24

Type: Actual

## **Ethics review**

Positive opinion

Date: 21-08-2014

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 ID

NTR-new NL4603 NTR-old NTR4754

Other University Medical Center Utrecht: METC 14-274

## **Study results**