# Ultrasound tissue characterisation for the biceps femoris long head proximal tendon: differences between individuals with and without proximal hamstring tendinopathy and reliability

No registrations found.

**Ethical review** Positive opinion

**Status** Pending

**Health condition type** -

**Study type** Observational non invasive

# **Summary**

### ID

NL-OMON24776

Source

NTR

### **Health condition**

Proximal hamstrings tendinopathy; proximale hamstring tendinopathie

# **Sponsors and support**

**Primary sponsor:** Maastricht University

Source(s) of monetary or material Support: Maastricht University

### Intervention

### **Outcome measures**

### **Primary outcome**

UTC echo types as determined by the algorithms based on the stability of the gray-scale pixel brightness over multiple transverse B-mode ultrasound images

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### **Secondary outcome**

Within-session intra-observer reliability

# **Study description**

### **Background summary**

Ultrasound tissue characterisation (UTC) is a relatively new method that can be used to determine the structure of tendinous tissue. Previous studies have shown differences in Achilles and patella tendon structure between individuals with and without tendinopathy using UTC. No study has investigated whether UTC can detect differences in tendon structure between individuals with proximal hamstring tendinopathy (PHT) and individuals without PHT. Further, the intra-observer reliability of ultrasound tissue characterisation on the conjoint tendon and intramuscular tendon of the biceps femoris longhead is unknown. The primary aim of this study is to validate UTC for the proximal hamstring tendon by investigating whether it can detect differences in tendon structure between individuals with and without clinically diagnosed PHT. A secondary aim is to investigate the within-session intra-observer reliability of ultrasound tissue characterization

### **Study objective**

UTC can detect differences in hamstrings tendon structure between individuals with and without clinically diagnosed proximal hamstring tendinopathy.

## Study design

n.a.

### Intervention

n.a.

# **Contacts**

**Public** 

**Scientific** 

# **Eligibility criteria**

### Inclusion criteria

To be eligible to participate in this study as a participant without PHT, the participant must meet all of the following criteria:

- Male;
- Between 18-35 years old;
- Participating in sports that involve running for at least three times per week. Sports that meet the criterion of involving running are football (soccer) rugby, hockey and running.

To be eligible to participate in this study as a participant with PHT, the participant must meet all of the following criteria:

- Male:
- Between 18-35 years old;
- Background in, or currently active in a sport that involves running for at least three times per week;
- Clinically diagnosed PHT.

### **Exclusion criteria**

- Severe visual or hearing impairment;
- BMI outside 18-25;
- Known cardiovascular or other diseases:

For control participants, the following additional exclusion criteria apply:

- History of a previous injury to the thigh within the previous 5 years;
- Pain, ache or soreness in the thigh within the previous year

# Study design

# **Design**

Study type: Observational non invasive

Intervention model: Other

Masking: Single blinded (masking used)

Control: N/A, unknown

### Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-03-2019

Enrollment: 26

Type: Anticipated

# **Ethics review**

Positive opinion

Date: 10-01-2019

Application type: First submission

# **Study registrations**

# Followed up by the following (possibly more current) registration

ID: 55782

Bron: ToetsingOnline

Titel:

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

No registrations found.

# In other registers

Register ID

NTR-new NL7474
NTR-old NTR7716

CCMO NL64767.068.18 OMON NL-OMON55782

# **Study results**

### **Summary results**

n.a.