

# Effect of the use of a patellar strap and sports tape on jumper's knee complaints.

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Pending
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON22717

### Source

Nationaal Trial Register

### Brief title

TOPPRO-study

### Health condition

patellar tendinopathy, jumpers knee

## Sponsors and support

**Primary sponsor:** UNiversity Medical Center Groningen

**Source(s) of monetary or material Support:** ZonMw

## Intervention

## Outcome measures

### Primary outcome

The Visual Analogue Scale (VAS) for pain will be used as the main study outcome in both parts of the study. With this measure subjects indicate on a continuous line between two end points their level of pain. The VAS pain scale is a valid and reliable measure of chronic and acute pain intensity (Bijur, Silver, & Gallagher, 2001) (Downie et al., 1978).

In the first part, the primary study parameter is the VAS pain score after ten single leg decline squats. In the second part of the study, the primary study parameter is the difference between the baseline and the intervention week in the average score on the VAS pain scale during sports.

## **Secondary outcome**

In the first part of the study, the secondary study parameter is the VAS pain score after the maximal vertical jump test and the triple hop test. Furthermore, the height in meters of the highest jump during the maximal vertical jump test for each condition and the distance in meters that is covered by three jumps during the triple hop test are considered secondary study outcomes.

In the second part of the study, the difference in average VAS pain score between the baseline week and the intervention week in the two hours after sports and the next morning are secondary study parameters. The difference in sports participation (the number and duration of training/matches and missed training/matches a week) between the baseline week and the intervention week is also a secondary study outcome.

# **Study description**

## **Background summary**

Patellar tendinopathy is a common overuse injury that has a major impact on the knee function and often interferes with the sport career of jumping athletes. Orthoses like a patellar strap and sports tape are often used to reduce the pain in this condition and to be able to remain active in sports. However no scientific evidence for a positive effect on pain and sports participation is available. The first aim of this study is to determine the effect of a patellar strap and sports tape on pain and sports participation in subjects with patellar tendinopathy. The second aim is to study if there is a relationship between the effectiveness of the orthoses and subjects' characteristics, sports related factors and severity of injury.

## **Study objective**

We expect to find a positive effect on jumpers knee complaints as a result of the use of patellar strap and sports tape.

## **Study design**

1. Baseline;

2. 2 weeks.

## **Intervention**

In the first part of the study, all subjects perform three functional tests under four different conditions (patellar strap, sports tape, sports tape (placebo), control). The order of the conditions is balanced between subjects.

The three functional tests are shown and explained to the subject. The execution of the tests is preceded by a warming up period of five minutes on a home trainer. The three functional tests are: ten single leg decline squats, the maximal vertical jump test and the triple hop test.

Directly after each test, the participant scores on a VAS pain scale the experienced pain during the test. In addition, the height of the jumps of the maximal vertical jump test and the covered distances of the triple hop test will be documented for each subject.

In the second part of this study subjects are randomly divided into four groups of 35 subjects after stratification for phase of injury. The first week all participants document in a log (in the normal situation) the experienced pain during and after training and matches and the amount of pain the next morning. Further, they document the number and duration of (missed) training and matches. After this week, subjects do the same, but now with one of the following interventions: patellar strap, sports tape, placebo tape or control.

## **Contacts**

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## Eligibility criteria

### Inclusion criteria

1. Age 18-50 years;
2. Current symptoms of knee pain in the patellar tendon or its patellar or tibial insertion in connection with training and competition in one or both knees;
3. Duration of symptoms for over three months (to exclude acute inflammatory tendon problems and de novo partial ruptures);
4. VISA- P score < 80;
5. Palpation sensitivity in the patellar knee area;
6. Participating athlete.

### Exclusion criteria

1. Acute knee and patellar tendon problems;
2. Chronic joint disease(s);
3. Signs or symptoms of other knee pathologies.

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Placebo

## Recruitment

NL  
Recruitment status: Pending  
Start date (anticipated): 01-12-2012  
Enrollment: 140  
Type: Anticipated

## Ethics review

Positive opinion  
Date: 10-10-2012  
Application type: First submission

## Study registrations

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

ID: 39696  
Bron: ToetsingOnline  
Titel:

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

No registrations found.

### In other registers

Register	ID
NTR-new	NL3480
NTR-old	NTR3660
CCMO	NL42287.042.12
ISRCTN	ISRCTN wordt niet meer aangevraagd.
OMON	NL-OMON39696

## Study results

## **Summary results**

N/A