

# Neurodynamic test in patellofemoral pain syndrome

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| <b>Submission date</b><br>21/04/2015   | <b>Recruitment status</b><br>No longer recruiting     | <input type="checkbox"/> Prospectively registered<br><input type="checkbox"/> Protocol            |
| <b>Registration date</b><br>20/05/2015 | <b>Overall study status</b><br>Completed              | <input type="checkbox"/> Statistical analysis plan<br><input checked="" type="checkbox"/> Results |
| <b>Last Edited</b><br>14/05/2019       | <b>Condition category</b><br>Musculoskeletal Diseases | <input type="checkbox"/> Individual participant data  |

## Plain English summary of protocol

### Background and study aims

Patellofemoral pain syndrome (PFPS) is a common disorder which describes pain in the front of the knee and around the kneecap. PFPS is sometimes called 'runner's knee' or 'jumper's knee' because it's common in people who play sports. PFPS is most common in females and young adults. People with PFPS experience pain around the knee during both rest and physical activity. Triggers of pain include bending the knee, using stairs or taking part in sports or exercise. There is little agreement on the causes of PFPS, but it is thought to be caused by a misalignment within the knee and putting too much weight on the knee joint and surrounding area. Another explanation for the cause of PFPS is that the pain is caused by an irritated nerve located in either the lower back or possibly the thigh. The aim of this study is to gain a better understanding of PFPS and its causes. Patients diagnosed with PFPS in one knee will be tested for signs of altered nerve sensitivity in the affected knee compared to their unaffected knee. The results of this study might help shed light on the causes of PFPS.

### Who can participate?

Adults having physiotherapy for PFPS.

### What does the study involve?

Participants have a thorough screening examination to assess their condition and complete questionnaires. A physiotherapist carries out two movement tests on both knees and assesses pain levels using an established scoring system. The session takes around 90 minutes and is carried out in the physiotherapy clinic.

### What are the possible benefits and risks of participating?

A benefit of taking part in this study is that all participants will have a thorough assessment of their knee problems. There are no specific risks to participants.

### Where is the study run from?

Hans & Olaf Physiotherapy Centre (Hans & Olaf Fysioterapi) (Norway)

### When is the study starting and how long is it expected to run for?

January 2010 to October 2010

Who is funding the study?  
Norwegian Fund for Postgraduate Training in Physiotherapy (Norway)

Who is the main contact?  
Ms K Vegstein

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Ms Kristine Vegstein

**Contact details**  
Lysaker Manuellterapi  
PO Box 24  
Lysaker  
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1324

## Additional identifiers

**Protocol serial number**  
N/A

## Study information

**Scientific Title**  
Neurodynamic test in patellofemoral pain syndrome: a pilot study

**Study objectives**  
Is there increased mechanosensitivity in the femoral nerve in patients with unilateral PFPS (patellofemoral pain syndrome)?

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**  
1. University of Bergen, 2010.  
2.REK (Regional Committee for Medical and Health Research Ethics), Norway.

**Study design**  
Cross sectional pilot study

**Primary study design**  
Observational

**Study type(s)**

Diagnostic

**Health condition(s) or problem(s) studied**

Patellofemoral pain syndrome

**Interventions**

Neurodynamic testing of the femoral nerve:

1. Butler prone knee bend (PKB) test
2. Butler slump knee bend (SKB) test
3. Maitland Posterior- Anterior (PA) unilateral movement. test for lumbar segmental pain

**Intervention Type**

Other

**Primary outcome(s)**

Levels of pain experienced during neurodynamic testing, assessed using a numeric pain scoring system.

**Key secondary outcome(s)**

PA unilateral test to investigate whether patients suffer from back pain on the PFPS affected side.

**Completion date**

31/10/2010

**Eligibility**

**Key inclusion criteria**

1. Adults aged 18–44 diagnosed with unilateral PFPS
2. Patients with a pain history of more than 3 months (i.e. chronic pain) and which is experienced during rest and/or during physical (e.g. pain when doing knee bends, using stairs or taking part in sports or exercise activities).
3. Patients able to carry out normal daily activities

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Total final enrolment**

**Key exclusion criteria**

1. Patients with known intraarticular disorders or other systemic pathological conditions
2. Patients who have undergone previous surgery or suffered knee trauma in the affected leg
3. Patients who have received knee injections within 3 months of taking part in the trial

**Date of first enrolment**

01/05/2010

**Date of final enrolment**

30/08/2010

**Locations****Countries of recruitment**

Norway

**Study participating centre**

Hans & Olaf Physiotherapy Clinic (Hans & Olaf Fysioterapi)

Torggata 16

Oslo

Norway

0181

**Sponsor information****Organisation**

Norwegian Fund for Postgraduate Training in Physiotherapy (Norway)

**Funder(s)****Funder type**

Government

**Funder Name**

Norwegian Fund for Postgraduate Training in Physiotherapy (Norway)

**Results and Publications**

# Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Available on request

## Study outputs

| Output type                                   | Details                       | Date created | Date added | Peer reviewed? | Patient-facing? |
|---|-------------------------------|--------------|------------|----------------|-----------------|
| <a href="#">Results article</a>               | results                       | 08/05/2019   | 14/05/2019 | Yes            | No              |
| <a href="#">Participant information sheet</a> | Participant information sheet | 11/11/2025   | 11/11/2025 | No             | Yes             |