Patellofemoral Pain Syndrome Minimal Data Set Information and Instructions

**Clinical Question:** Is standard physical therapy more effective than foot orthoses more effective in decreasing pain in young adults with patellofemoral pain syndrome?

**Patient Demographics**
- **Dates:** Should all be in MM/DD/YYYY format.
- **Sex:** Circle M for male and F for female. This problem seems to affect females more often than males.¹
- **Prior History of Knee Problems:** Circle Y for yes and N for no for any previous knee problems the patient may have had
- **Physical Activities:** Certain physical activities may aggravate or worsen the condition. Mark any activities they may participate in and list any others that may not already be given.
- **Pain duration/occurrence:** Mark the answer that best represents when their pain occurs. If none of the answers fit when the patient is experiencing pain, then mark other and write in the patient’s response.

**Q-angle:** Landmarks for measurement are from ASIS to mid-patella and mid-patella to tibial tubercle. Normal angle should be 10° for males and 15° for females. A positive test is indicated when the angle is greater than normal. This test is utilized because a high Q-angle is associated with patellofemoral dysfunction.²

**Visual Analog Scale (VAS):** A 100mm horizontal line on which the patient marks where they feel it best represents their current level of pain. The line corresponds to severity of pain on a scale from 0mm to 100mm; 0 is represented on the left side of the line and 100 being to the very right. You measure from the left to where they marked and record it in mm (i.e. if the patient’s response is measured at 78mm, this would correspond to a pain level of 7.8/10). This is valuable when looking at change within an individual. The VAS can be used as a valid and reliable measure (reliability coefficient was r=0.97, for validity +0.7) for both the intensity and unpleasantness of pain.³

**Lower Extremity Functional Scale (LEFS):** Used to assess the patient’s ability to perform many common lower extremity tasks. It contains 20 questions with a total of 80 points possible. This is a self-administered questionnaire and the patient should not receive any help from the therapist while completing the questionnaire. The LEFS has high test retest (ICC=0.98) reliability with a minimal detectable change of 8. This was chosen over the anterior knee pain scale because the LEFS is more likely to show any changes that occur.⁴

**Vastus Medialis Coordination Test:** Have the patient lay supine and PT places fist behind the pt’s knee. Pt extends knee slowly without pressing down or lifting away from PT’s fist. They should be able to reach full extension. If full extension is lacking or the movement was uncoordinated then it is a positive test for dysfunction of the vastus medialis oblique (VMO), which commonly results in patellofemoral dysfunction. This test has a specificity of 96%, which means it is good for ruling in VMO dysfunction.²,⁵
Global rating of change: Used to assess if a patient feels they are making progress or not. It is quick and can be tailored for any condition. 6

Created by Amber Domingo and Bree-lyn vom Steeg Date: June 7, 2011

References:


Patellofemoral Pain Syndrome Data Collection Sheet

Date: __/___/_______
Pt name: ___________________
Therapist: __________________

Demographic information:
Age: ____
Sex: M   F
Height: __________
Weight: ________
Date of onset: ___/___/______
Prior history of knee pain: Y   N

Physical activities:
  Walking:      Y  N
  Running:      Y  N
  Biking:       Y  N
  Other sports/activities: ___________________________________________________

Pain duration/occurrence: ___ constant ___ only with activity ___only after activity
___rarely ___after being seated for long periods ___other___________________________

Imaging: ___MRI      ___X-ray
Q-angle:  L ____  R____
Visual Analog Scale (VAS) Score: _____
Lower Extremity Functional Scale (LEFS) Score: _____
Vastus Medialis Coordination Test:  P   N
Global Rating of Change: ____

Treatment options:
1. VMO strengthening
2. Hip ER/abductor/adductor strengthening
3. Foot orthotics
4. Patellar taping
5. LE stretching
Prepared by Jason Melton & Mike Williams
06/16/11


<table>
<thead>
<tr>
<th>Column Totals:</th>
<th>Score: 80</th>
<th>Minimum Level of Detectable Change (90% Confidence): 3 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>20.0 Holding onto bed.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>19.0 Hoping.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>18.0 Making 10 steps without turning last.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>17.0 Running on uneven ground.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>16.0 Running on even ground.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>15.0 Sitting for 1 hour.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>14.0 Standing for 1 hour.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>13.0 Going up 10 steps (about 1 flight of stairs).</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>12.0 Walking a mile.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>11.0 Walking 2 blocks.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>10.0 Getting in or out of a car.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>9.0 Performing heavy activities around your home.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>8.0 Performing light activities around your home.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>7.0 Lining up objects like a bag of groceries from the floor</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>6.0 Submitting.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>5.0 Putting on your shoes or socks.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>4.0 Wearing between rooms.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>3.0 Getting into or out of the bath.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>2.0 Your usual hobbies, occupational or sporting activities.</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>0</td>
<td>1.0 Any of your usual work, household, or school activities.</td>
</tr>
</tbody>
</table>

Today, do you or would you have any difficulty at all with:

- Currently, select one number (1-8) to indicate the difficulty you are having on a 1-8 scale, with 1 indicating no difficulty and 8 indicating extreme difficulty.

We are interested in knowing whether you are having any difficulty at all with the activities listed below because of your lower limb problem for which you are receiving treatment.

The Lower Extremity Functional Scale
**Visual Analog Scale**

No pain | Very severe pain

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**Global Rating of Change Form**

1. In regards to your knee pain, how would you say you are today compared to your first visit? (circle your choice)
   - No Change
   - Worse
   - Better

   If better or worse, how much so?
   1 Almost the same
   2 Somewhat
   3 Moderately
   4 A great deal

2. How important would you say this change is? (Circle your choice)
   1 Not important
   2 Almost the same
   3 Somewhat
   4 Moderately
   5 A great deal