Sharing decision-making between patient and clinician: the next step in evidence-based practice for patellofemoral pain?

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The ‘Best Practice Guide to Conservative Management of Patellofemoral Pain’ synthesized level 1 evidence from high-quality systematic reviews with international expert opinion. The associated publication and guide (see Table 1) provides a tool to facilitate research translation and evidence-based practice (EBP) in the management of patellofemoral pain (PFP). This tool is freely available to clinicians treating PFP worldwide.

The ‘Best Practice Guide’ outlines available evidence for various passive, active and educational interventions. However, it makes up just one of the three key components of EBP. By definition, EBP incorporates (1) the best external evidence, (2) the clinician’s individual experience, and (3) the patient’s beliefs and expectations.⁵ Therefore, the published guide alone does not capture the clinicians experience related to the perception of how this evidence might apply to an individual patient (point 2, above), or the patient’s values and preferences (point 3, above). Disregarding these factors may impair clinical outcomes and patient satisfaction.

WHAT ARE THE LEVEL 1 TREATMENT OPTIONS?
The level 1 evidence base for PFP supports exercise, foot orthoses, and patellar taping and bracing, with a tailored combined approach recommended.¹ Although risks related to PFP intervention options are minimal, the patient must consider several things. For example, combining multiple interventions may cost more time and money. For example, when choosing an evidence-based exercise approach for a patient with PFP, the combination of quadriceps and hip exercises appears to be more effective than quadriceps alone.³ However, completing more exercises will also be more time consuming, and the patient may be unwilling or unable to make the required commitment. Foot orthoses do not require the same time commitment as exercise rehabilitation, so this may be more attractive for some patients. However, orthoses must fit in appropriate footwear and are considered by expert opinion to be less effective than exercise rehabilitation.¹ This illustrates the panoply of decisions that can quickly arise from even a simple clinical context (ie, one pathology, fairly clear evidence).

WHAT IS SHARED DECISION-MAKING AND ARE WE DOING IT?
Shared decision-making (SDM) involves a collaborative approach between patient and clinician to decision-making based on available treatment options and associated evidence for benefit and harm, alongside the patient’s values and preferences.⁴ Légaré et al⁵ recently outlined three elements that underpin the rationale behind policymakers’ embracing SDM. In summary, policymakers believe shared decision-making:

1. Is a fundamental right of patients. They must be involved in treatment decisions
2. May improve healthcare efficiency (ie, reduce provision of ineffective interventions and increase provision of effective interventions)
3. Promotes a more sustainable healthcare system due to increased patient ownership of their health.

What are the most effective strategies to improve the use of SDM? Does SDM ultimately improve patients reported outcomes? These questions have yet no clear answer.³ However, SDM interventions such as decision aids show promise, and may improve patient knowledge and accuracy of expected outcomes related to benefit and harm of treatments.⁵ ⁶

Table 1: Best Practice Guide to Conservative Management of Patellofemoral Pain—adapted from Barton et al.¹

<table>
<thead>
<tr>
<th>Education</th>
<th>Active rehabilitation</th>
<th>Passive interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ensure patients understand potential contributing factors to their condition and treatment options</td>
<td>Principles</td>
<td>Pain reduction</td>
</tr>
<tr>
<td>2. Advise about appropriate activity modification</td>
<td>1. Give preference to CKC exercises to replicate function</td>
<td>1. Provide tailored patellar taping to reduce pain in the immediate term</td>
</tr>
<tr>
<td>3. Manage patients expectations regarding rehabilitation</td>
<td>2. Consider OKC exercises in early stages of rehabilitation to target specific strength deficits and movements</td>
<td>2. Consider PFJ braces where taping is inappropriate (eg, skin irritation)</td>
</tr>
<tr>
<td>4. Encourage and emphasise the importance of participation in active rehabilitation</td>
<td>3. Provide adequate supervision in the early stages to ensure correct exercise techniques, but progress to independence as soon as possible</td>
<td>3. Consider foot orthoses Optimising biomechanics</td>
</tr>
</tbody>
</table>

1. Incorporate quadriceps and gluteal strengthening | 4. When independent, limit the number of exercises to 3 or 4 to aid compliance | 1. Consider foot orthoses based on assessment findings (ie, presence of excessive dynamic pronation) |
| 2. Target distal and core muscles where deficits exist | 5. Use biofeedback such as mirrors and videos to improve exercise quality | 2. Consider massage and acupuncture/dry needling to improve the flexibility of tight muscle and fasciae structures, particularly laterally |
| 3. Consider stretching, particularly of the calf and hamstrings, based on assessment findings | 4. Incorporate movement pattern retraining, particularly of the hip | 3. Consider PFJ mobilisation but only in the presence of hypo-mobility |

Italics signifies guidance based on expert opinion without supporting level 1 evidence. CKC, closed kinetic chain; OKC, open kinetic chain; PFJ, patellofemoral joint.

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found the extent to which healthcare providers involve patients in decision-making and adjust decisions to their preferences is low across a range of health conditions and settings. We have no reason to believe PFP is an exception. SDM requires the treating clinician to possess knowledge of the potential benefits, harms and burdens of available treatment options, but it is unclear to what extent clinicians possess knowledge of the ever growing evidence base for PFP. The ‘Best Practice Guide’ provides one free resource to facilitate the translation of knowledge to clinicians managing PFP. The scarcity of other, possibly more patient friendly and freely available resources such as decision aids to facilitate knowledge translation and SDM may be a major barrier to implementing the current evidence base in PFP management.

The current paucity of tools to facilitate SDM and other translational resources to educate clinicians and patients on PFP and its management requires urgent attention if we are to truly improve patient outcomes in the real world. The ‘Best Practice Guide to Conservative Management of Patellofemoral Pain’ addresses some of the barriers to implementing SDM, but alone, is simply not enough.

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