Rotator cuff disorders in workers: a systematic review of existing clinical practice guidelines

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Introduction

Background:

Several clinical practice guidelines (CPGs) on RC disorders have been developed.

A systematic appraisal of these CPGs is lacking.

Research objectives:

To perform a systematic review of CPGs on the management of RC disorders in workers.

Methods

A literature search in nine bibliographical databases was conducted up to May 2017.

CPGs on the management of RC of shoulder disorders in adults and/or workers were included.

Standardized data extraction was performed.

The methodological quality was assessed with the AGREE II tool.

Qualitative synthesis of the evidence was performed.
## Quality of the evidence

<table>
<thead>
<tr>
<th>criteria</th>
<th>Yes</th>
<th>No or not specified</th>
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<td>Development involved a systematic review</td>
<td>7</td>
<td>2</td>
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<tr>
<td>Development involved a systematic consultation of stakeholders</td>
<td>3 (2 Delphi)</td>
<td>6</td>
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<td>Declaration of competing interests mentionned</td>
<td>3</td>
<td>6</td>
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<tr>
<td>Methods for formulating the recommendation are described</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Presence of an explicit link between the evidence and the recommendation</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Externally reviewed</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

**3 CPGs have a low risk of bias - 6 CPGs have a high risk of bias**

One of the 3 CPG with a low risk of bias only covers medical imaging. Methodological quality was also assess with the AGREE II
## Clinical recommendations

### Assessment of shoulder pain

- ✔️ Using self-reported questionnaires is recommended
- ✔️ Using specialists tests is recommended or may be recommended
- ✗ Radiography are not recommended in order to confirm a RC tendinopathy
- ✔️ Radiography may be recommended in the presence of a trauma
- ✔️ Ultrasound, MRI or arthro-MRI may be recommended if there is inadequate improvement with the conservative treatment

### Medication to reduce pain for RC tendinopathy and full thickness RC tear

- ✔️ Acetaminophen is recommended or may be recommended
- ✔️ NSAIDs may be recommended
- ✔️ A corticosteroid injection may be recommended but the indications varies depending on the CPGs
- ✔️ Education regarding prescribed medication is recommended

### Rehabilitation

- ✔️ Exercises is recommended for RC tendinopathy
- ✔️ Exercises is recommended or may be recommended for full thickness RC tear
- ✔️ Manual therapy is either recommended or may be recommended for both conditions
- ✔️ Heat, cold, acupuncture and TENS may be recommended for both conditions
- ✗ Theraueptic ultrasound is either not recommended or may be recommended for RC tendinopathy

### Surgical treatment

- ✔️ A consultation with a specialist is recommended when there is a suspected full thickness RC tear
- ✔️ A consultation with a specialist is recommended or may be recommended if there is inadequate improvement with the conservative treatment
- ✔️ Acromioplasty may be recommended if the conservative treatment failed
- ✗ A routine acromioplasty during a RC repair is not recommended
Discussion and conclusion

- The methodological quality of CPGs is generally poor
- Ultrasound or MRI should be prescribed if there is inadequate improvement with conservative care
- Exercises are recommended for RC tendinopathy while there is no consensus for full thickness RC tear
- There is no consensus on the benefit of manual therapy
- Medications are recommended under certain conditions
- Patients with inadequate improvement with conservative care or with a suspected full thickness RC tear should be referred to a specialist