What are the likely benefits of arthroscopic surgery and non-surgical options?

**Subacromial decompression vs. placebo**

HIGH CERTAINTY EVIDENCE* that subacromial decompression is little-to-no better than placebo...

*We are very confident that the figures below represent the true benefits of surgery

Placebo = the patient goes under anaesthetic and the surgeon inserts the surgical tools BUT no further procedure is performed

**Rotator cuff repair vs. no surgery**

LOW-MODERATE CERTAINTY EVIDENCE* that rotator cuff repair is little-to-no better than no surgery...

*We have low-moderate confidence that the figures below represent the true benefits of surgery

No surgery = injections, physiotherapy, medication or no treatment

**KEY MESSAGE:**

On average, surgery leads to 2.6% less pain and 2.8% better function compared to placebo surgery at 12 months.

Most patients would not consider these benefits important.

**What % of people report treatment success?**

- treatment success rated by patients
- treatment not a success

*Each figure represents one person. We can’t predict whether you will be one of the people who is helped.*

<table>
<thead>
<tr>
<th></th>
<th>Surgery</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>26.4</td>
<td>29</td>
</tr>
<tr>
<td>Function</td>
<td>71.8</td>
<td>69</td>
</tr>
</tbody>
</table>

With surgery, **5 more people out of 100** will report their treatment as successful at 12 months.

<table>
<thead>
<tr>
<th></th>
<th>Surgery</th>
<th>No surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>7.3</td>
<td>16</td>
</tr>
<tr>
<td>Function</td>
<td>78</td>
<td>72</td>
</tr>
</tbody>
</table>

With surgery, **8 more people out of 100** will report their treatment as successful at 12 months.

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Supplemental material


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### What are the likely benefits of surgery compared to non-surgical options?

The figures on this page are based on the most up-to-date medical research as of 2020 (see references at the bottom of this page).

**KEY MESSAGE**

On average, patients report that surgery improves pain and function by less than 10% (i.e. an improvement in pain or function of less than a 1 point on a 0-10 pain scale) compared to non-surgical options in the short term (6 months after) and longer term (1-2 years after)³. Because most patients do not notice these improvements, research concludes:

- Subacromial decompression surgery is not better than placebo or non-surgical options (i.e. injections, exercise, medication or no treatment) for people with shoulder pain and no full-thickness rotator cuff tears.⁴
- Rotator cuff repair surgery is little-to-no better than non-surgical options for people with full-thickness rotator cuff tears.⁵

These results are averages. Surgery improves pain and function by more than 10% for some patients. But other patients have either no improvements or worse pain and function after surgery.

**Further information:**

³ For subacromial decompression surgery, we are very confident about this key message because research on this surgery is high-quality. This research was mostly conducted on people aged in their 40s, 50s and 60s, but is the best evidence we have for all ages.

⁴ For rotator cuff repair surgery, we are somewhat confident about this message because there is lack of high-quality research on this surgery. This research was mostly conducted on people aged in their 50s and 60s but is the best evidence we have for all ages. Research on rotator cuff repair surgery does not apply to people who tear a tendon following trauma, or people with a full-thickness tear of the subscapularis tendon.

⁵ Research suggests exercise or activities that you can do yourself at home may be just as helpful as a supervised exercise program.