Gender Differences in 10770 Open Carpal Tunnel Releases - a National Registry Based Cohort Study

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Conclusions

• Women with CTS rate their symptoms higher than men in QuickDASH
• Relative improvement is higher in women
• Tasks requiring more grip strength are scored higher by women
• Gender differences should be considered when evaluating patients with CTS

Background

Carpal tunnel syndrome (CTS) is more common amongst women. We aimed to investigate gender differences in symptoms before and after open carpal tunnel release.

All (n=10770) open carpal tunnel releases, registered in the Swedish Nation Quality Register for hand surgery (HAKIR) between 2010 and 2016, were included. Outcome was assessed by QuickDASH questionnaires and eight questions in Likert scale (HQ-8) preoperatively and at three and 12 months postoperatively.

Results

In the study population 67% (n=7169) were women with an age of median 54.0 years (IQR 42.0-66.0; men median 59.0 years IQR 48.0-70.0; p<0.0001). HQ-8 and QuickDASH data were available in 33% (n=3600) preoperatively, in 26% (n=2826) at three months and in 19% (n=2037) at twelve months.

In the HQ-8 questions, women scored higher on load pain, weakness and ability to carry out daily activities both pre- and postoperatively. Men scored higher on cold sensitivity both before and after surgery.

In individual QuickDASH items, women scored higher on opening a tight or new jar (Q1), doing heavy household chores (Q2), carrying a shopping bag or briefcase (Q3), using a knife to cut food (Q5), ability to do recreational activities (Q6) both preoperatively and at twelve months postoperatively.

Women scored higher on washing your back (Q4), interference with social activity (Q7), interference with work (Q8), severity of pain (Q9), severity of numbness/tingling (Q10) and difficulty sleeping (Q11) preoperatively, but the differences had disappeared after 12 months.

<table>
<thead>
<tr>
<th></th>
<th>Women (n=7169)</th>
<th>Men (n=3601)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preop QuickDASH</td>
<td>54.5 [38.6-68.2]</td>
<td>43.2 [27.3-59.1]</td>
<td>p&lt;0.0001</td>
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<tr>
<td>Postop 3m QuickDASH</td>
<td>25.0 [11.4-45.5]</td>
<td>18.2 [6.8-36.4]</td>
<td>p&lt;0.0001</td>
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<tr>
<td>Postop 12m QuickDASH</td>
<td>18.2 [4.5-40.0]</td>
<td>11.4 [2.3-34.1]</td>
<td>p&lt;0.0001</td>
</tr>
<tr>
<td>Change in QuickDASH</td>
<td>27.3 [11.4-40.9]</td>
<td>20.5 [9.1-36.4]</td>
<td>p=0.002</td>
</tr>
</tbody>
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