A 6-year Evaluation of a Pre-operative and Post-operative Empowering Physiotherapy Program for Patients with Lumbar Pathologies

Presented by
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Introduction

Target: Patients with lumbar spine pathologies who are going to receive surgery

In order to...
• Improve their physical function
• Optimize their psychological preparation
• Enhance the expectation management of the surgical outcomes

A comprehensive empowering management program was launched

Objective
To evaluate the effectiveness of a comprehensive empowering pre-operative and post-operative PT management program for patients with lumbar spine pathologies.
Methodology

**Patient agreed / showed hesitation for spinal surgery**

**Patient attended pre-operative education & sharing session**

**Patient attended pre-operative PT Ax**

**Patient received spinal surgery**

**Patient received post-operative intensive PT training**

**FCE if indicated**

**Regular meetings and follow-up clinic involving patients, surgeons & PT to evaluate the patient’s progress**

**Outcome measures:**

1. Pre-operatively (Pre-op)
2. First post-operative session (Post-op)
3. Final physiotherapy session (Final)

- Numerical Pain Rating Scale (NPRS)
- Roland Morris Disability Questionnaire (RMDQ)
- Fear-Avoidance Beliefs Questionnaire – Physical Activity (FABQ - PA) and Work (FABQ - W)
- Hospital Anxiety and Depression Scale – Anxiety (HADS - A) and Depression (HADS - D)
- Numeric Global Rating of Change Scale (NGRCS)
From July 2008 to Dec 2014, 353 patients completed the program.

The work status was significantly improved:
- Working population increased from 24.8% to 51.2%.

Outcome measures at pre-operative vs final physiotherapy session:

<table>
<thead>
<tr>
<th>Outcome measures</th>
<th>Pre-OP</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPRS</td>
<td>6.5</td>
<td>3.1</td>
</tr>
<tr>
<td>RMDQ</td>
<td>12.6</td>
<td>8.4</td>
</tr>
<tr>
<td>FABQ - W</td>
<td>27.2</td>
<td>17</td>
</tr>
<tr>
<td>FABQ - PA</td>
<td>20.8</td>
<td>13.4</td>
</tr>
<tr>
<td>HADS - A</td>
<td>12.5</td>
<td>8.1</td>
</tr>
</tbody>
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All parameters: p<0.05
Conclusion
The program was found to be effective in reducing back pain, restoring functional activities, resuming work duties, alleviating anxiety for those patients received lumbar spine surgery.