1770 - Does indirect decompression after LLIF always work?

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Anterior column interbody fusions techniques rely on their ability of indirect decompression to treat stenotic conditions as they can not act over posterior structures of the column.

Indirect decompression relies on the capacity of the cage/surgeon to restore the disc height that consequently promotes a phenomenon know as ligamentotaxis.

Some conditions were set as to indirect decompression, such as Posterior or Bony Recess stenosis or Blocked Facets.
Methods

Retrospective, Single-center, Non-comparative, Non-randomized study

Inclusion:
Patients that underwent LLIF for stenotic conditions, patients without any primary contraindication for indirect decompression.

Exclusion:
Lost to Follow-up before one-year

64 patients after query

exclusion

0 patients

64 patients included

Outcomes:

Primary
Need of Posterior Decompression

Secondary
Worst Leg Pain improvement after surgery

Measures:

Risk Ratio

5 pre-determined classes: 100% improvement, 50-99% improvement, 1-49% improvement, 0% improvement, Worsen of symptoms
Results

Risk of Reoperation

Of the Sixty-four patients (64) included patients, only three (3) needed posterior decompression of index level giving a risk ratio of (4.7%).

<table>
<thead>
<tr>
<th>Total</th>
<th>Posterior Decompression</th>
<th>No Revision</th>
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<tbody>
<tr>
<td>64</td>
<td>3</td>
<td>61</td>
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Risk Ratio = 4.7%
After indirect decompression a great amount of the patients presented 50% or higher improvement (64% at PosOp to 81% at 3m)
Results

However, even without contraindications some patients did not have successful outcomes, with patients presenting worsening of symptoms.
LLIF and Indirect Decompression is a safe and efficacious procedure to treat stenosis-related symptoms.

However some studies showed that this capabilities might be reduced or null at some cases (contraindications), such as Bony recess stenosis, blocked facets, posterior-components stenosis.

Moreover, as showed by our study, even without contraindications, 5% of the patients needed to perform a posterior decompression after the index surgery, and about 17% did no perceived clinical improvement at postoperative period.

The limitation of our study includes it retrospective design, however we attend to overpass this issue by performing a prospectively data collection. And the lack of complete clinical data at the follow-ups.
• Indirect decompression after LLIF is reliable and capable of relief stenotic symptoms from non-posterior or bony origins.
  • 64% of improvement at Postoperative period

• However, 16% of the patients reported no improvement of leg pain postoperatively, and about 5% of the cases needed posterior decompression in 1 year.