Intraoperative Hip Flexion Facilitates Insertion of Larger Interbody Spacers During TLIF Procedures- 1875

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No Disclosures.
Introduction

Placement of adequate size interbody spacers during transforaminal lumbar interbody fusion (TILF) procedures is important for lordosis preservation or restoration.

• Particularly challenging at L5-S1 level

• 2017: We began placing patients in hip flexion until interbody spacer was inserted, after which we restored neutral position
Objective

To compare interbody spacer size before and after the implementation of table flexing prior to interbody spacer insertion.

Patient consent obtained for these photographs.
Study Design

**Group 1**
- Jan 2017– Dec 2018
- n = 46
- Table flexing technique

**Group 2**
- Jan 2015 – Dec 2016
- n = 49
- No change in table position

- L4-L5 and/or L5-S1 TLIF at our institution
- Groups were compared for preoperative disc height, relative spacer size, and perioperative complications
- Disc height was calculated by averaging the anterior, middle, and posterior disc heights measured on PACS
- Spacer size was noted from chart and measured on postoperative imaging
Results

<table>
<thead>
<tr>
<th></th>
<th>Group 1 - Table Flexion</th>
<th>Group 2 – Neutral Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preoperative Disc Height</td>
<td>8.4mm (6.0-12.3mm)</td>
<td>8.2mm (5-11mm)</td>
</tr>
<tr>
<td>Spacer Height</td>
<td>11.4mm (9 - 14mm)</td>
<td>10.6mm (7-15mm)</td>
</tr>
</tbody>
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\( \bar{x}, [a,b] \)

- One patient with postoperative radiculopathy due to spacer retropulsion in the second group that required revision
Conclusion and Future Directions

• During TLIF procedures, placing the patient in hip flexion allows for larger spacer insertion and may prevent spacer backout postoperatively

• Anesthesia should be notified to restore table to neutral position to avoid fusion in kyphotic position
References

