

PLIF Cage Surgical Technique

Positioning: The patient is positioned on the operating table in a Prone or Knee-Chest position. This frame is used to maintain a lumbar lordosis and to avoid abdominal pressure to reduce bleeding.

Incision: The skin and fascia are incised in the midline at the affected level.

Exposure: The paravertebral muscles are retracted laterally, beyond the edge of the facet joints. The muscle exposure should also include the pedicle entry zone.

After the above situations are applied, the following steps are implemented.







Discectomy

Perform a bilateral opening by incising and annulus fibrosus with scalpel. And then, make a intervertebral space bilaterally and resect the remaining nucleus pulposus using punch, pituitary and rongeur. It may be possible to complete the discectomy at this step until the disc space distraction is accomplished.



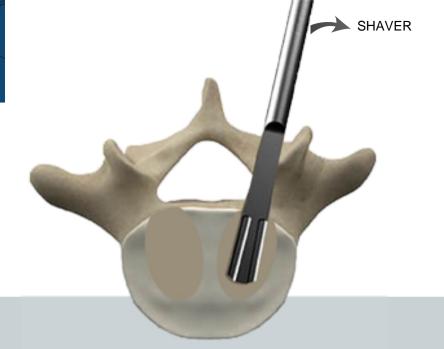
Distraction

The intervertebral disc space is distracted using a Distractor until the appropriate height. The distractor is coupled with the T-handle and then introduced on its flat side to one side of the intervertebral space. It is rotated 90° to distract the space then, the T-handle is removed. The 1mm larger Distractor is inserted on the opposite side as the same procedure. This process is carried out on alternating sides until the desired height is obtained. When the height of intervertebral space is adequate, the Distractor can be used as a role of the trial cage.



Endplate Preparation

Following decompression of the disc space and neural elements, a freehand technique can be used to prepare the end plates for space insertion. The goal of the end plate preparation is to create a combination of endplate bone and graft bone by removing the remaining cartilaginous endplate coverings. The preparation is performed by using Curette and Reamer Distractor.



PLIF Cage Preparation

The TALOS TLIF PEEK Cage is supplied which corresponds to the chosen final trial and gently advance into the disc space using TLIF Cage Holder. The trial cage is designed for use with cage holder in any cervical instrument. Starting with the smallest trial, sequentially larger trials are tamped completely into the disc space. The trial that procuders the most satisfactory fit in the disc space is selected. Successful trial selection confirms parallel endplate preparation. The trial should fit flush and produce a tight fit in the disc space.

If this is not possible, a larger trial should be attempted, or the end plates should be more adequately prepared, or both.



PLIF Cage Insertion

The cage is tapped into the disc space using a mallet. Intraspinal roots and vessels have to be carefully identified and must be protected by the Root Retractor before inserting the implant. After implanting the cage, remove the PLIF Cage Holder carefully.





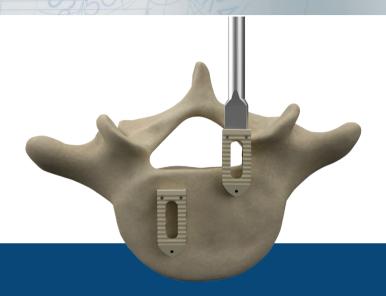
The optimal position of the cage is centered within periphery of the vertebral endplates. Depending on the size of the vertebrae, the posterior edge of the cage will be approximately 5 mm ahead of the posterior edge of the adjacent vertebrae. Fluoroscopy check can be done to verify the cage positioning.





Removal or Revision Procedure

Removal procedure can be made with implant instruments. If the surgeon needs, high speed drills can ben used.





ilkbahar Mah.Galip Erdem Cd. No:47 Çankaya - Ankara / TR +90 312 473 82 80 +90 312 473 81 90 info@osimplant.com www.osimplant.com.tr