

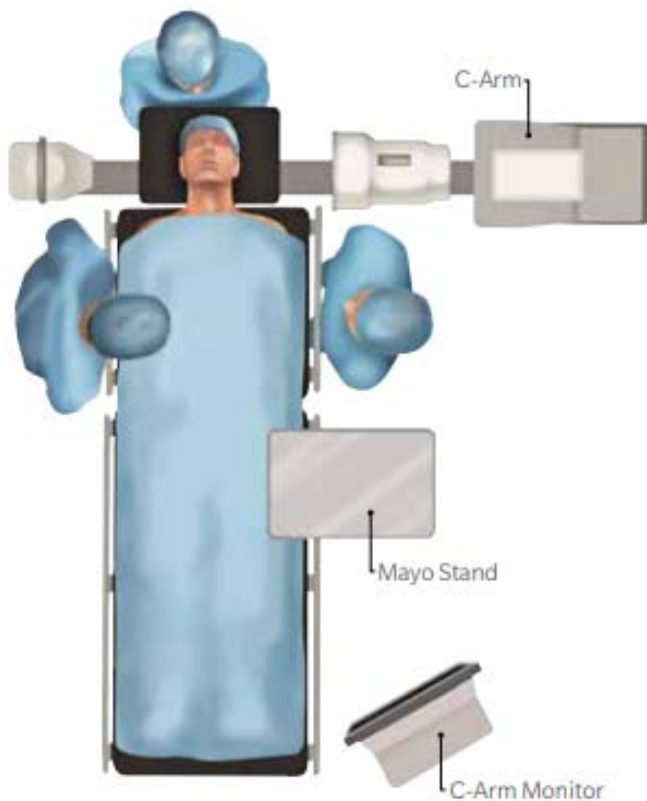
Lucero Medical Cervical Cage System

Surgical Technique

Rev B

Directions for Use

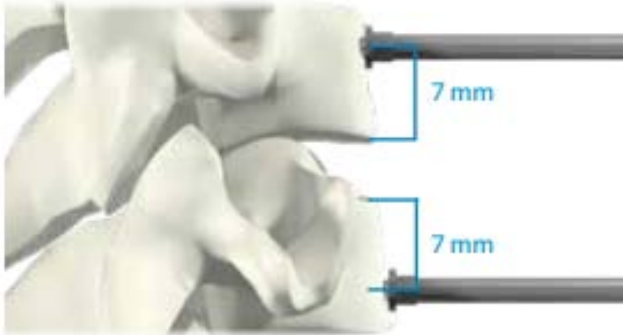
1. Identify the proper intervertebral level to fuse using the proper diagnostic techniques.
2. Place patient in a supine position, and support the posterior cervical spine so that normal lordosis is maintained.



3. Identify the symptomatic level, and choose a left- or right-side approach. Make a skin incision to the corresponding pathology.

4. Identify a dissection plane between the trachea and esophagus, and expose the cervical anatomy. Hold in place using self-retaining retractors.

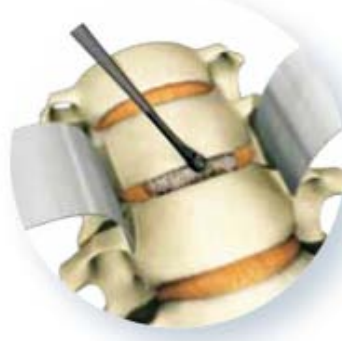
4.1. To confirm the proper level, use fluoroscopy imaging, using a needle as a marker. A vertebral distractor can then be placed in the incision in the adjacent vertebrae to the discectomy location



4.2. Be sure to confirm that all exposed blood vessels and nerves are properly retracted before proceeding with the discectomy

5. Perform a cervical discectomy and decompression by resecting the anterior longitudinal ligament over the corresponding vertebrae. Then, remove the anterior osteophytes, and the anterior portion of the annulus fibrosis.

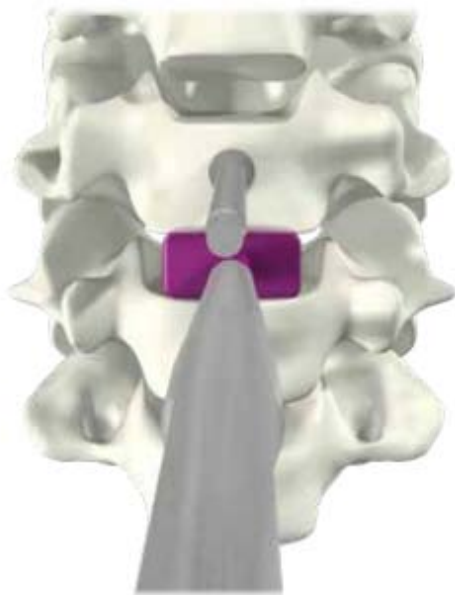
6. Make a window corresponding to the size of the implant. Remove the intervertebral disc out to the uncovertebral joints using general instrumentation such as Currettes or Rongeurs. Distract the disc space (A Capspar Distractor is recommended for the distraction).



7. Complete a neural decompression by trimming large posterior osteophytes (if present). Prepare the endplates by using the appropriate rasps. Remove a minimal amount of the cartilaginous endplates to create a flat surface of bleeding bone.

7.1. Note: Excessive force from using the instruments can rupture the posterior annulus or damage the vertebral endplates.

8. Determine the implant size to be used using the appropriate trials. The appropriate size will require some force to fully insert. No force for insertion indicates that the trial is too small.



8.1. The ideal thickness size for the graft is approximately 2 mm greater than the pre-operative disc height.

9. The hole in the center of the implant should be packed with autogeneous bone (usually harvested from the iliac crest).

10. Attach the filled implant to the supplied inserter by placing the outer prongs into the holes on the implant, and threading the central bar into the implant by twisting the metal end of the inserter handle clockwise.



11. Insert the implant into the prepared space, and position it appropriately using the inserter. When ready to disengage, unthread the inserter from the implant by twisting the end the opposite way (counter-clockwise).

11.1. If the implant is not positioned correctly, reengage the inserter, or use the supplied tamp by aligning it with the implant, and tapping it to get the implant into position.

- 12.** The final position of the implant should be slightly posterior to the anterior aspect of the vertebral bodies. Lateral and A/P radiographs may be taken to assure proper insert placement.



- 13.** After the implant is positioned correctly, supplemental fixation should be used. The supplemental device should not have a dissimilar material in contact with the implant, so as to avoid the possibility of corrosion.



- 14.** Should an implant need to be removed or revised and the device is encased in bone a partial corpectomy may be preformed using an osteotome or other preferred techniques. Once the device is free of bone, it can be removed using forceps, or revised using the standard surgical technique.