

coflex™ Surgical Technique

# Surgical Technique



**PARADIGM SPINE**  
*the movement in spine care*

# coflex Surgical Technique



**coflex**™

Interspinous Implant



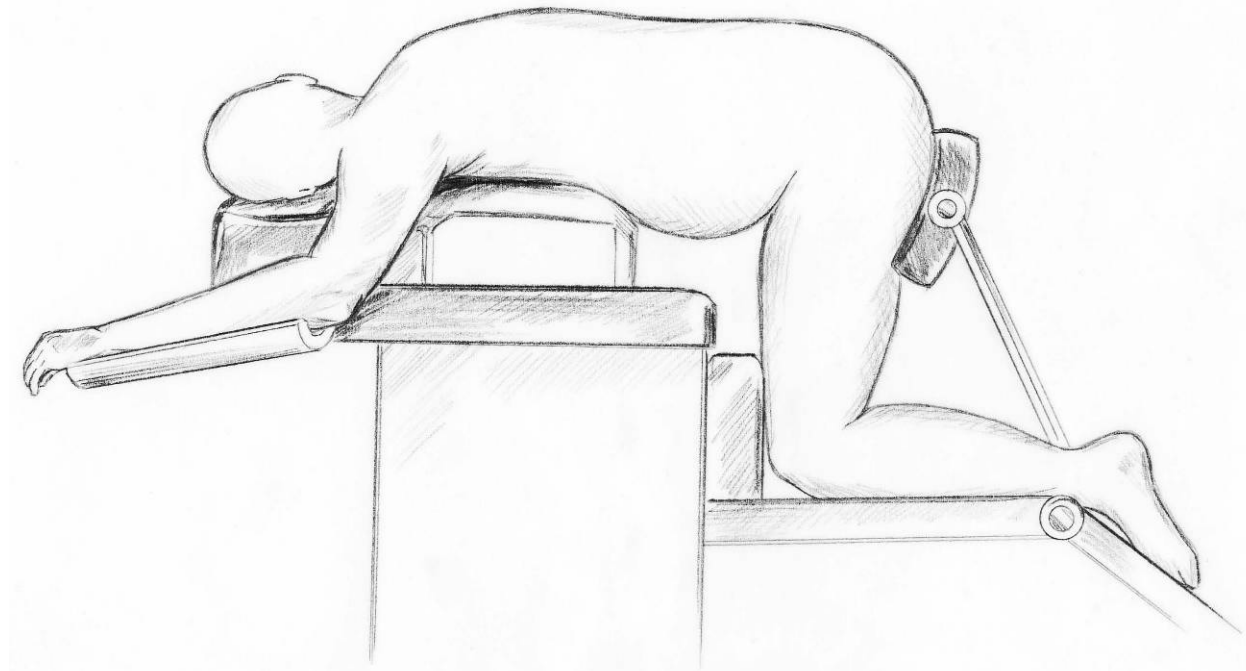
**PARADIGM SPINE**  
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# Overview

- I. **Preparation**
- II. Microsurgical Decompression
- III. Implant Site Preparation
- IV. Implant Insertion



# Preparation



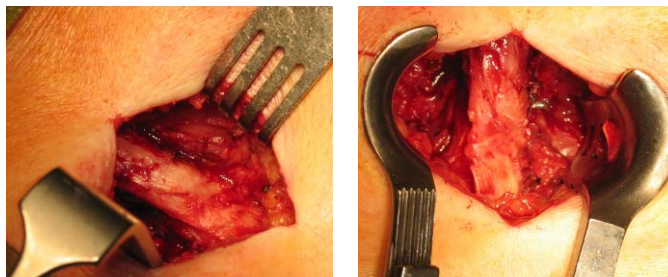
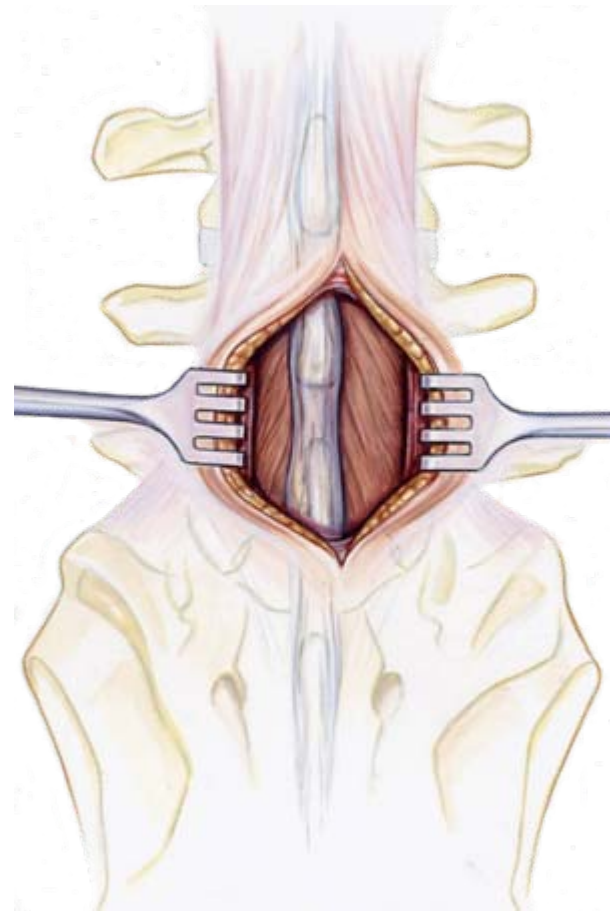
# Patient Positioning

- Patient is placed in prone position on surgical frame avoiding hyperlordosis of the spinal segment(s) to be operated upon.
- A neutral position or a slight kyphosis may be advantageous for surgical decompression as well as for appropriate interspinous distraction



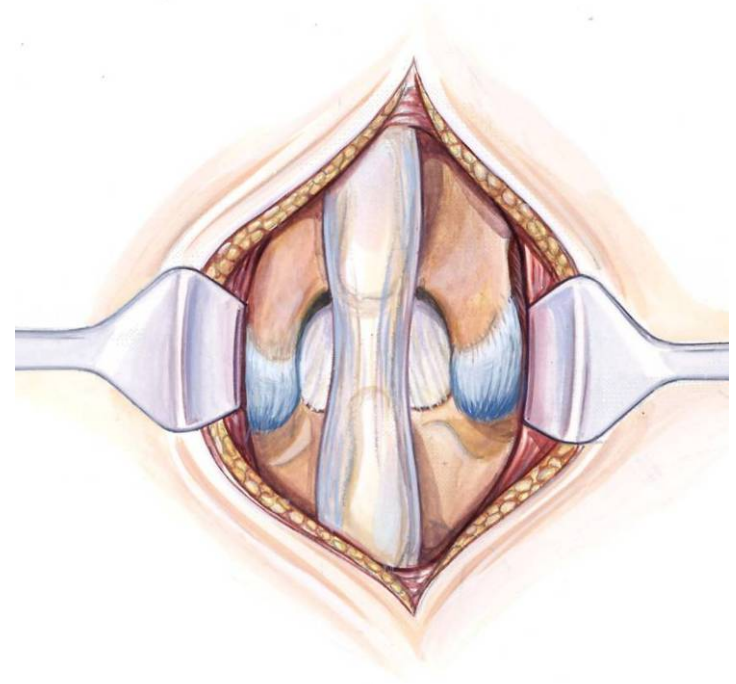
# Preparation

- Routine (midline) skin incision is performed.
- The muscle is sharply dissected lateral to the supraspinous ligament preserving the entire thickness of the supraspinous ligament.
- Alternatively the supraspinous ligament may be resected depending on surgeon's preference.



# Preparation

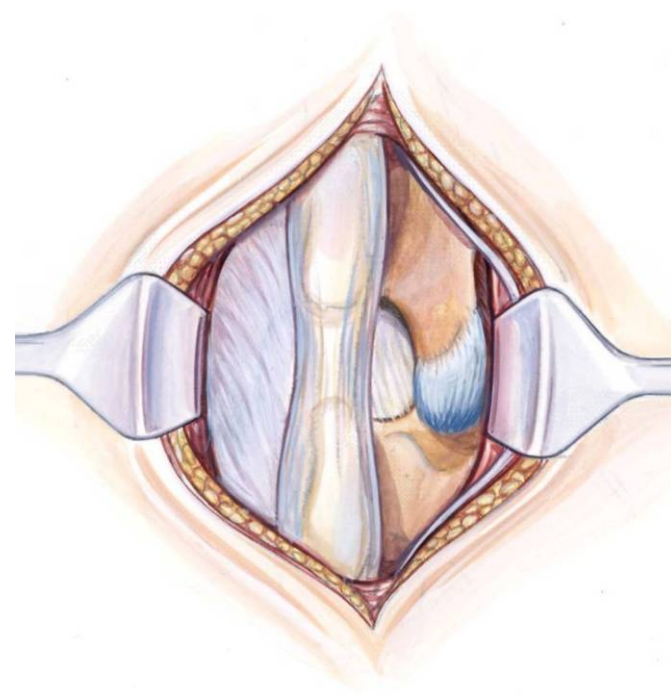
Paraspinal muscles are stripped off the laminae while preserving the facet capsules.





# Preparation

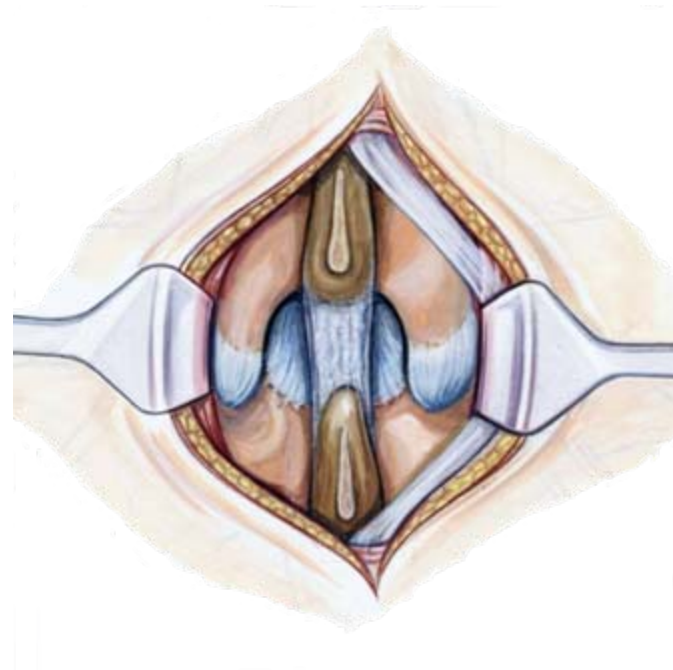
Note: Dependent on the pathology a microsurgical unilateral decompression can be performed and then the supraspinous ligament together with the fascia and muscle from the opposite side can be mobilized together. Completion of the microsurgical decompression can then be performed.





# Preparation

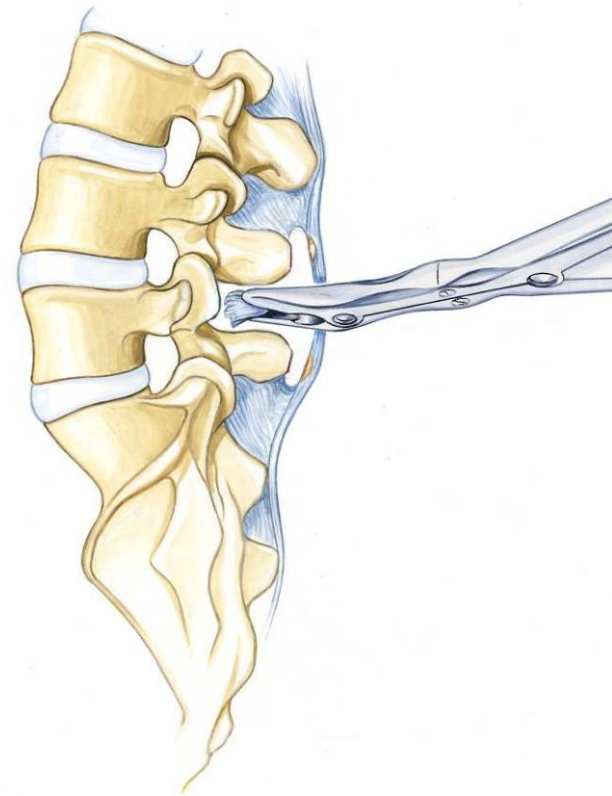
- The supraspinous ligament is dissected subperiostally and preserved as a thick cuff and retracted laterally.
- If possible a small portion of the bony tip can be resected together with the supraspinous ligament. This will aid a faster healing after reconstruction of the ligament.



# Interspinous Ligament

## Resection of interspinous ligament:

The interspinous ligament is sacrificed and any bony overgrowth of the spinous process that may interfere with insertion is resected.



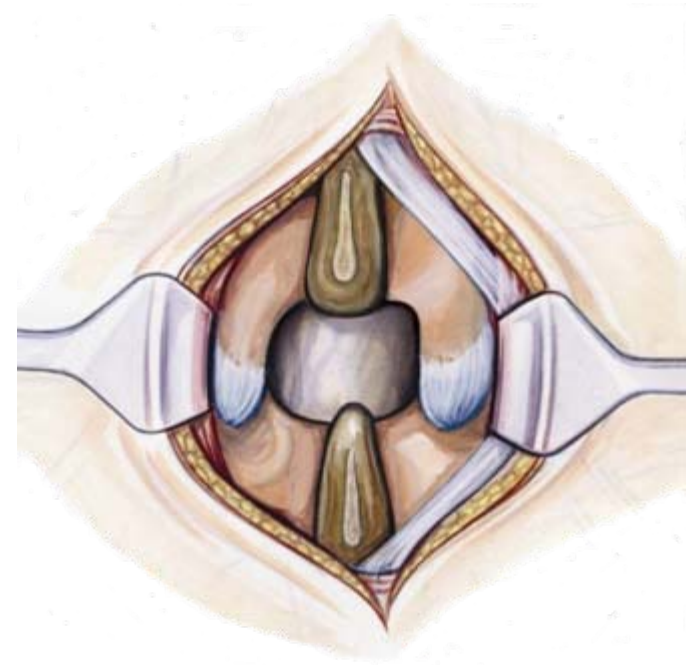
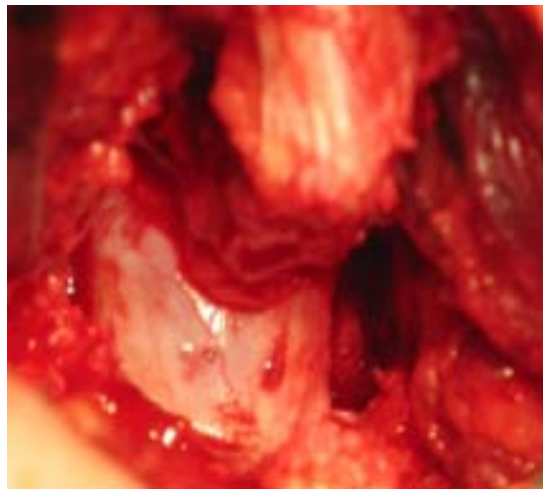
# Overview

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# Microsurgical Decompression

Ligamentum Flavum is then resected and microsurgical decompression is performed, relieving all points of neural compression.



# Overview

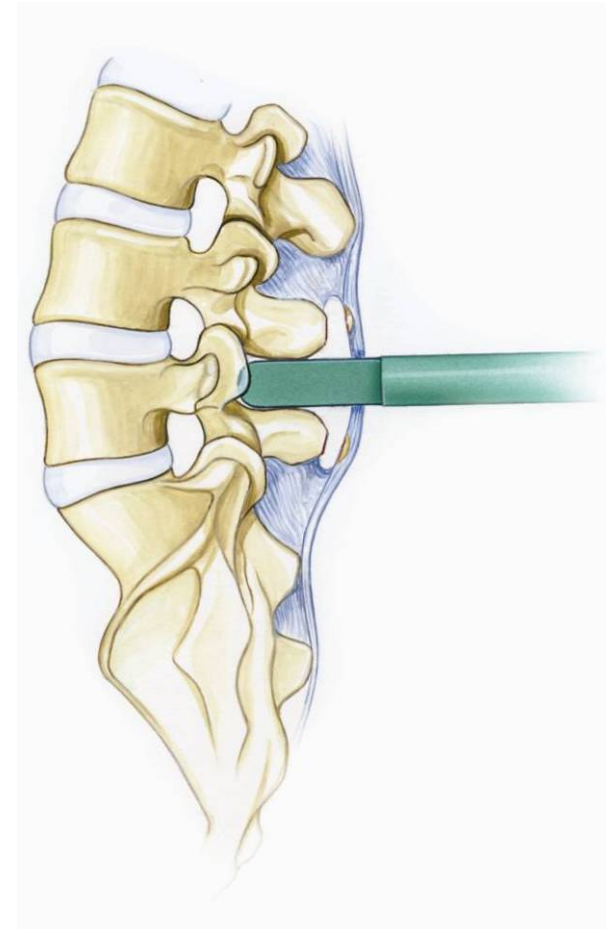
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# coflex™ Trial

## coflex™ Surgical Technique

- Trials are utilized to define appropriate implant size.
- Trial instrument is placed to evaluate proper contact with spinous process and amount of interspinous distraction.

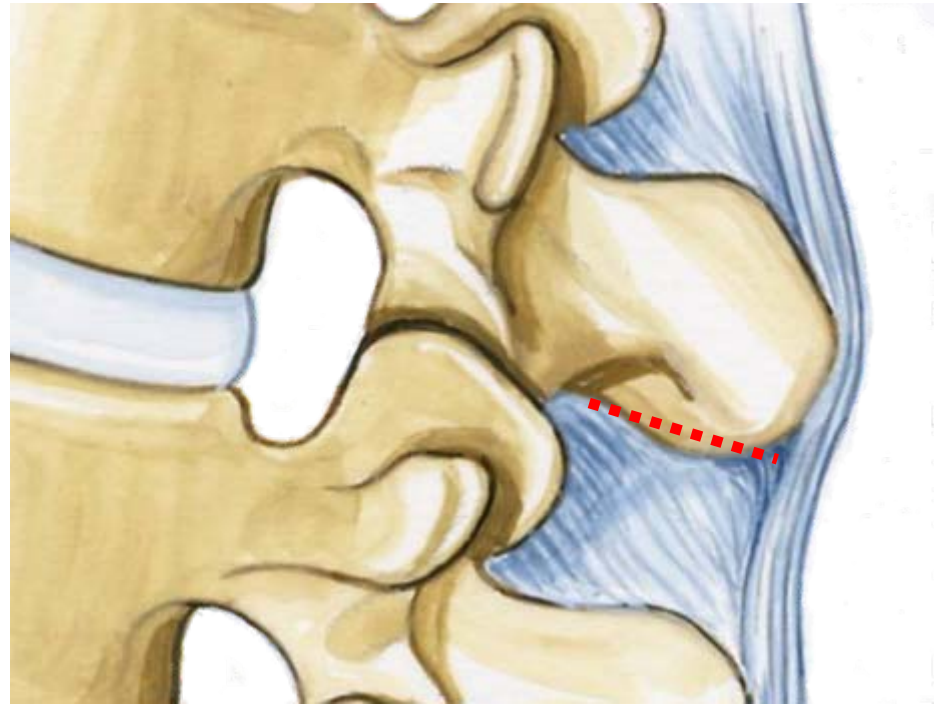


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# Implant Site Preparation

Some bony resection of the spinous process may be needed to ensure proper contact of the implant.



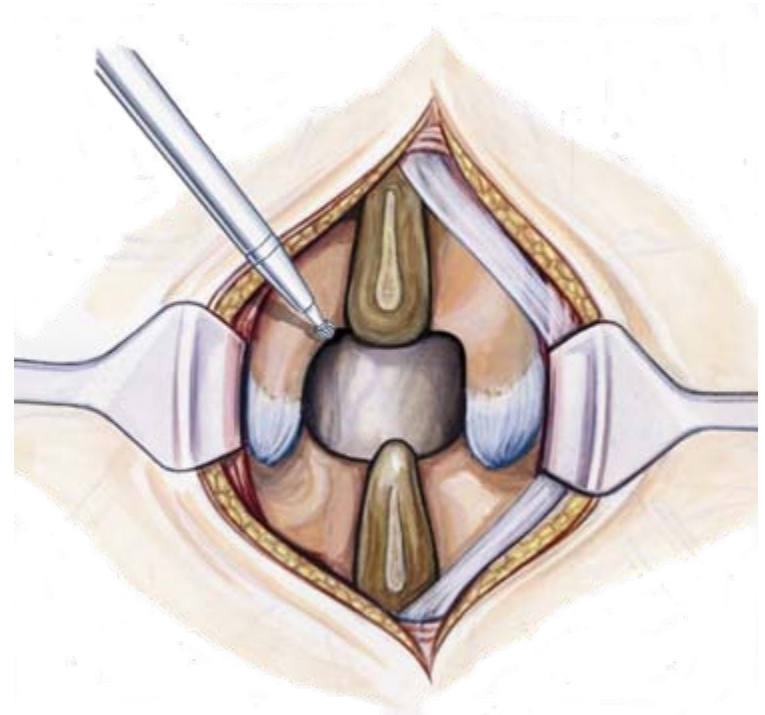
Bony resection to ensure flat surface





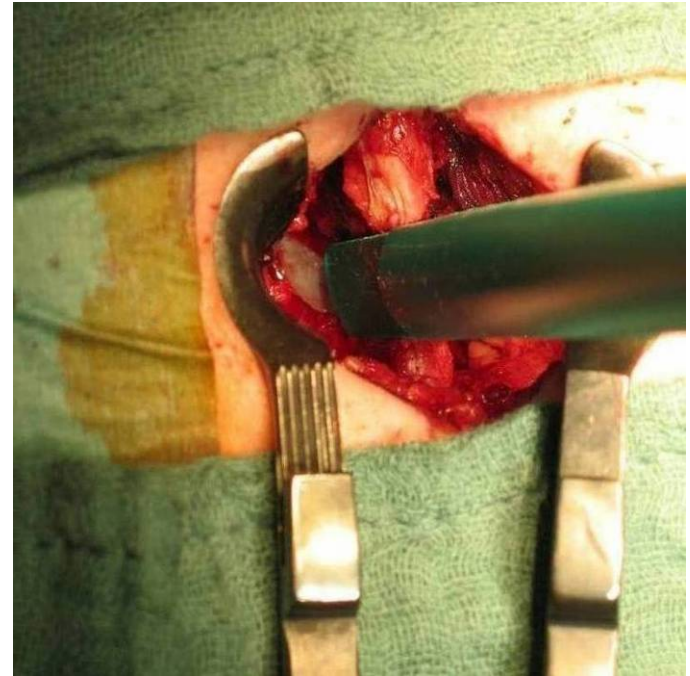
# Implant Site Preparation

To ensure proper depth of implant insertion a small portion of the laminar surface may need partial resurfacing.



# Implant Site Preparation

Distraction is considered to be appropriate to prevent any settling of the interspinous distance after successful decompression of the spinal stenosis.



# Overview

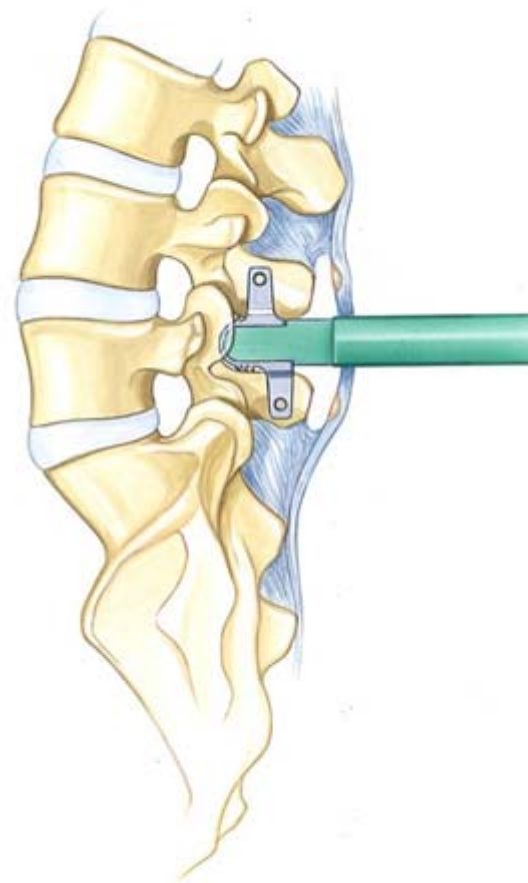
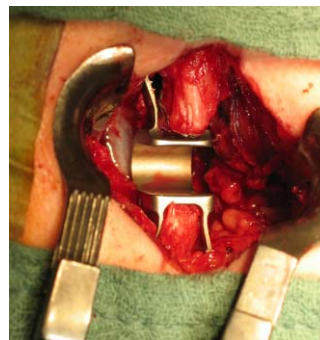
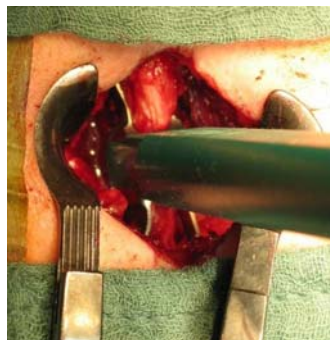
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# Implant Insertion

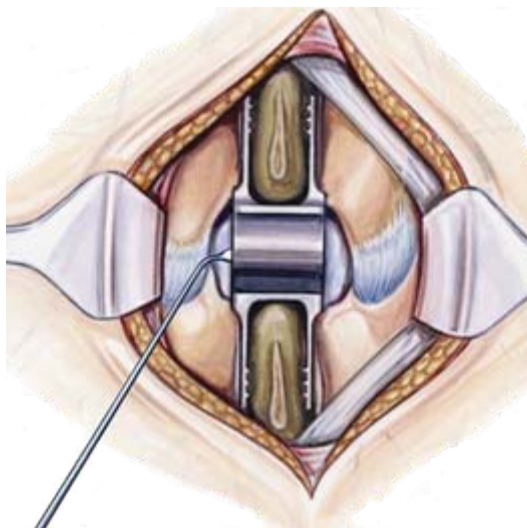
The wings may need to be opened slightly using bending pliers at the mid portion of the wing to ensure appropriate depth of insertion.

Implant is introduced via impaction utilizing a mallet.



# Implant Insertion

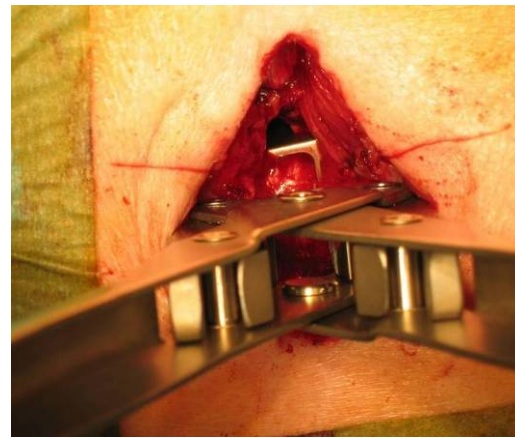
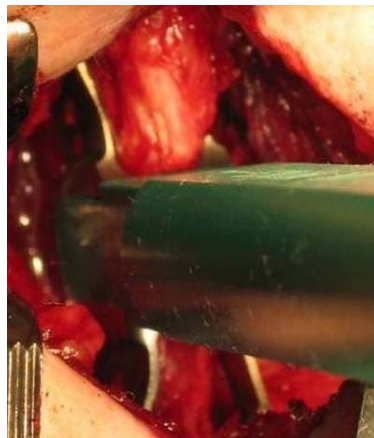
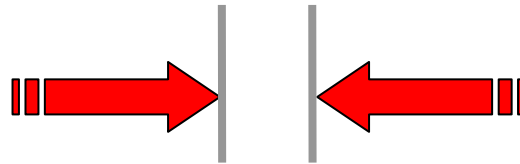
Proper depth is determined if a beaded tip probe can be passed freely leaving 3-4 mm separation from the dura. If the implant is not seated appropriately further resurfacing or slightly more impaction force may be utilized.





# Crimping of Wings

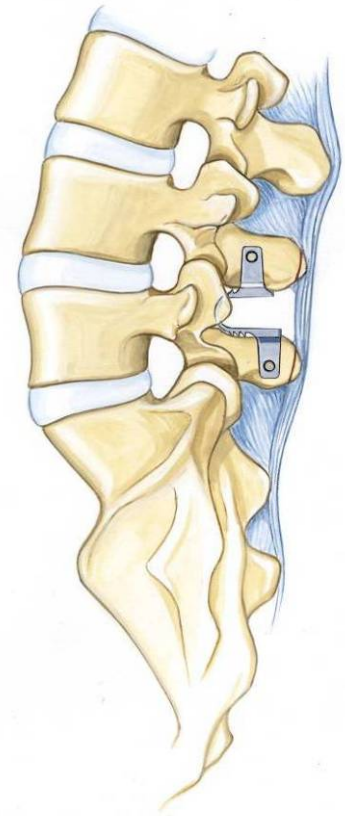
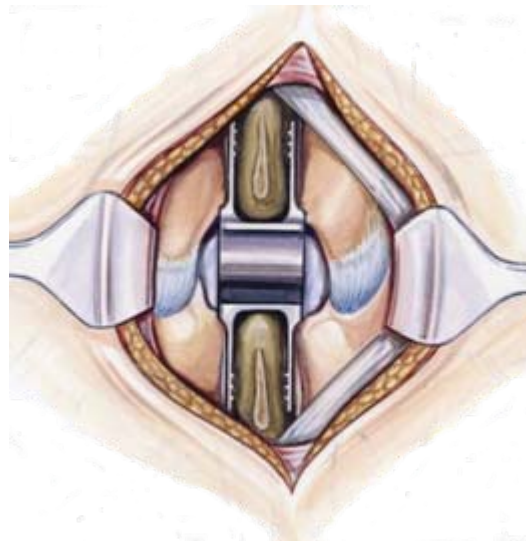
If the wings are not having sufficient bony contact additional stability can be achieved by slightly crimping the wings.



# Implant in Place

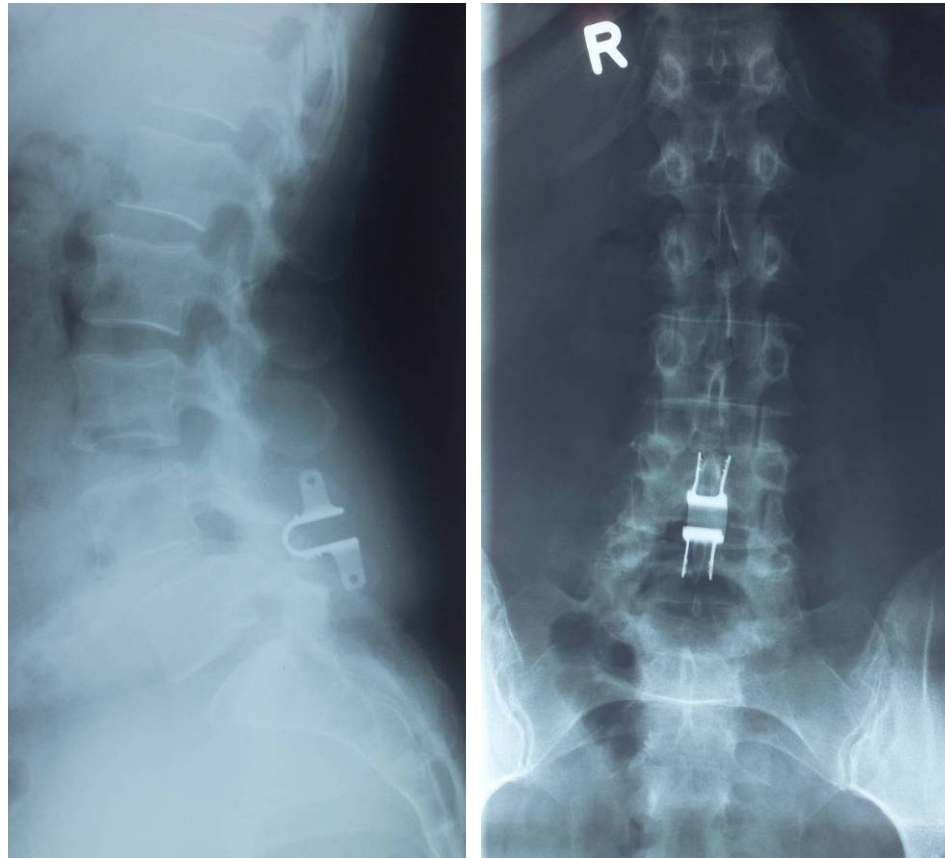
Coflex™ in place

The interspinous implant maintains distraction and is dynamically compressible in extension





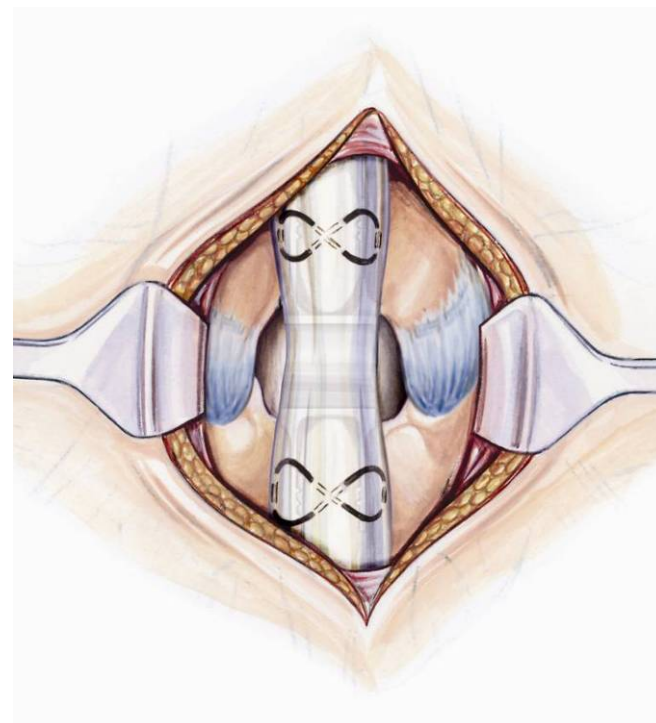
# Final X-Rays



# Supraspinous Ligament

## Resuturing of Supraspinous Ligament

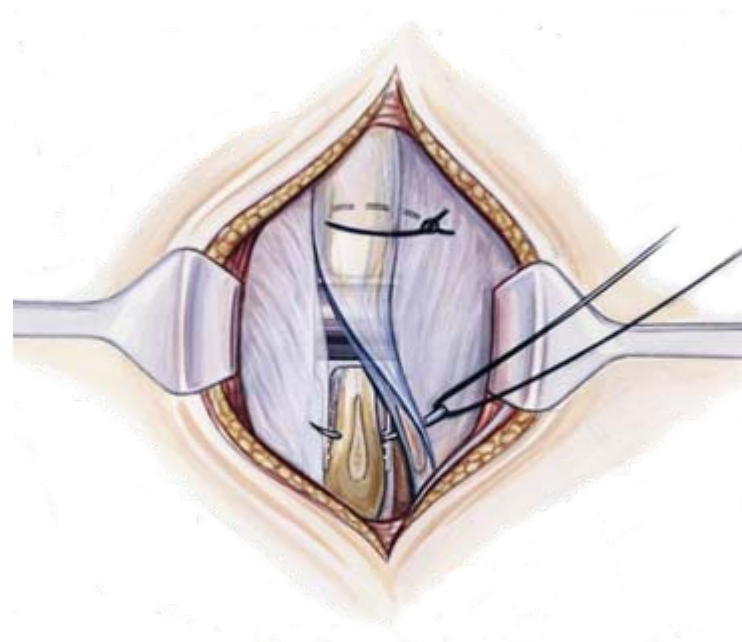
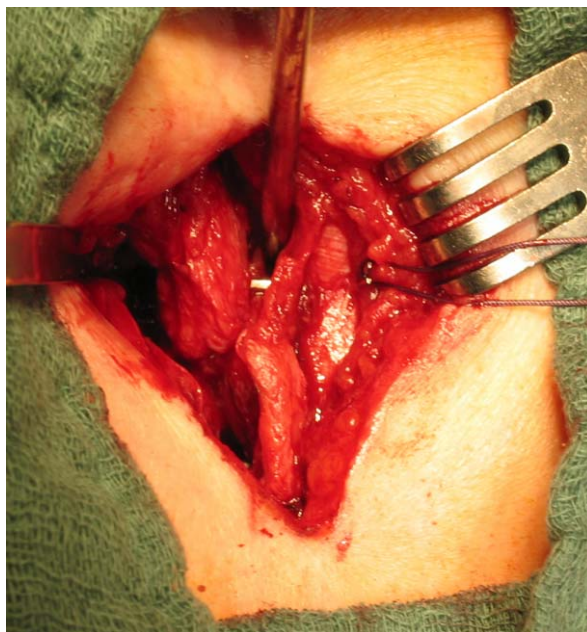
Figure of 8 suture through two bone holes in the spinous process and through the supraspinous ligament.



# Supraspinous Ligament

## Resuturing of Supraspinous Ligament

Alternatively the fascia and the supraspinous ligament can be closed in one layer over the spinous processes.



# Wound Closure

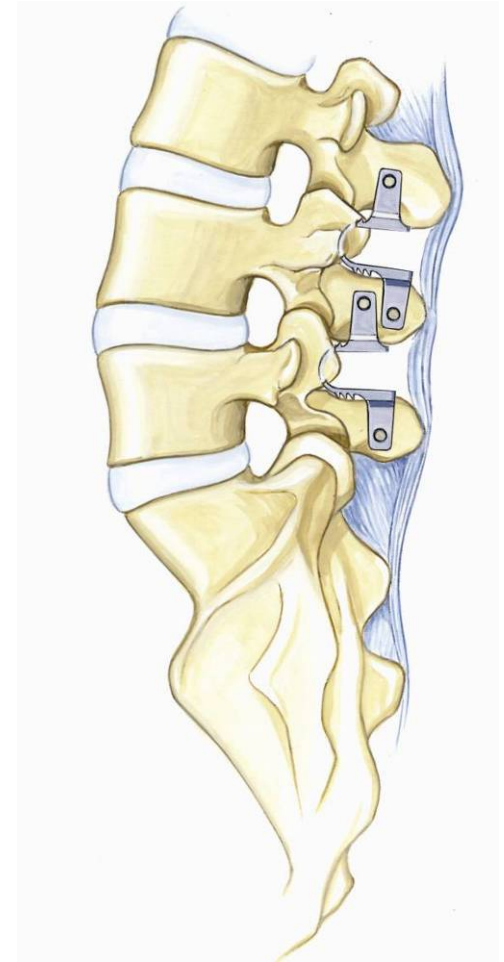
## Routine retreat – wound closure

A surgical drain may be placed as per surgeon preference. Paraspinal muscles are reattached to the supraspinous ligament. Skin is closed in the usual manner.



# Double Level Implantation

If a two level decompression is mandated the implants must be sequentially placed to the appropriate depth avoiding any overlap (contact) of one pair of wings upon the other.“





# Final X-Rays

