ReConnect Anterior Cervical System

iSpine

The ReConnect Cage is an interbody fusion device with internal screw fixation and is intended to be used in ACDF procedures to aid in cervical fusion and for restoring height of the intervertebral disc space after resection of the disc.

Indications

- *Degenerative disc disease*
- *Disc herniation*
- *Myelopathy*
- *Radiculopathy*
- *Spinal canal stenosis*

Features and Benefits

- *Ultra thin plate*
- *Safety locking device for screw pull out*
- *Optimal bone contact*
- *Various screw angle*
- *Large graft window to maximize the bone fusion rate*
- *Anatomic contour for optimized fit and stability contributing to a complete and successful fusion*

A hollow PEEK cage with a titanium (Ti6A14V Titanium Alloy) screw locking mechanism allows for rigid screw fixation without any added anterior profile.
Titanium bone screws feature an outer clip which engages the titanium face plate on the cage. A tantalum marker is embedded into the cage to help visually confirm the posterior position under fluoroscopy.

The cages are available in three different foot print sizes with four different heights available.

Sizes are as follows:				
12mm x 15mm	5.5mm	6.5mm	7.5mm	8.5mm
13mm x 16mm	5.5mm	6.5mm	7.5mm	8.5mm
14mm x 17mm	5.5mm	6.5mm	7.5mm	8.5mm

4.2mm x 12mm, 14mm and 16mm x 4.2mm standard variable angle self-drilling
4.2mm x 12mm, 14mm and 16mm conical variable angle self-drilling
4.6mm x 12mm, 14mm and 16mm variable angle, self-drilling rescue screws

The cage inserter features two options, a clamp-based inserter or a mini clip inserter for surgeons with a preference for a minimalistic approach.

Surgical Technique

Exposure and discectomy:

The patient is placed in the supine position.
An anterior approach to the cervical spine is used through a right or left cervicotomy.
The anterior aspect of the vertebral bodies cephalad and caudal to the segment involved are exposed.
The longus colli muscles are bluntly dissected from deep adherence and then retracted laterally.
The surgeon incises the annulus with a scalpel and completely excises the disc by means of a pituitary rongeur until the posterior longitudinal ligament is reached.

End plate preparation:

After decompressing the spinal cord and nerve roots, the surgeon prepares the endplates using a curette without damaging the underlying cortical bone.

Cage selection, preparation and insertion.

It is recommended to insert the ReConnect cage under distraction.
A trial is mounted onto the trial cage holder.
Select the smallest trial cage height for which proper stability is obtained. To test this stability distraction is normally relaxed. It is strongly recommended that the cage positioning as well as screw insertion be verified by fluoroscopy.

Once the appropriate cage has been selected, bone graft can be packed into the cage.

There are two inserter options:

1. The Clamp inserter:

- *Ensure that the gunmetal barrel is turned back anti-clockwise but not tight against the blue loading handle.*
- *Attach clamp to inserter by placing at tip of inserter and rotating blue handle until clamp is secure.*
- *The Guide/Clamp has a size corresponding to each implant size.*
- *Place cage in the middle of the clamp, rotate gunmetal barrel clockwise, this will tighten on the clamp closing the clamp to grasp the cage. Ensure that cage is loaded superior.*
- *Once the cage is attached to the Inserter, the assembly should be carefully impacted into the disc space.*
- *Inserter should be left in place when preparing the screw hole. These Inserters can accommodate awls, drills and screwdrivers.*
- *Create a pilot hole in the vertebral body using the Straight Awl or Angled Awl through the Inserter.*
- *Screws may be inserted using either the Straight Screwdriver or Angled Screwdriver, screw in until screw is flush with the back of reconnect base plate.*
- *Repeat screw hole preparation and insertion technique for the second screw hole.*
- *To remove cage inserter, turn gunmetal barrel anti clockwise whilst firmly holding the blue handle in place, this will widen the clamp releasing the cage.*
- *Check that screws are flush; you may now take the final driver and turn the locking plate clockwise to lock over the screws.*
- *Once the cage is in the correct position and the screws are locked, the wound is closed in the normal fashion.*

2. Minimal Clip inserter:

- *Ensure that the gunmetal barrel is turned back anti-clockwise but not tight against the blue loading handle.*
- *Attach clip inserter by placing at tip of Inserter and rotating blue handle until secure.*
- *Clip Inserter sizes correspond to cage heights selected. Ensure that correct clip Inserter is selected.*
- *Line cage up with clip Inserter, top clip lines up right of fin on titan plate, bottom clip lines up left of fin on titan plate, tighten by rotating gunmetal handle clockwise on Inserter handle.*
- *Once the cage is attached to the Inserter, the assembly should be carefully impacted into the disc space.*
- *Remove Inserter by turning the gunmetal handle anti clockwise whilst firmly gripping the blue handle in place, this will release the cage.*
- *Confirm the placement of the cage with fluoroscopy.*
- *Cage may be further impacted with punch, there are 3 sizes available, each corresponding with a footprint size.*
- *Create a pilot hole in the vertebral body using the Straight Awl or Angled Awl.*
- *Screws may be inserted using either the Straight Screwdriver or Angled Screwdriver, screw in until screw is flush with the back of reconnect base plate.*
- *Repeat screw hole preparation and insertion technique for the second screw placement.*
- *Check that screws are flush, you may now take the final driver and turn the locking plate clockwise to lock over the screws.*
- *Once the cage is in the correct position and the screws are locked, the wound is closed in the normal fashion.*

Above: frontal view of a three-level cervical fusion using our reconnect cages

Below: lateral view

Instrument Log

1

1. Cage impacter with stopper - small, medium & large

2

2. Bone graft tamp - small, medium & large

3

3. Cage inserter

4

4. Straight awl

5

5. Curved awl

6

6. Straight hex driver

7

7. Angled hex driver

8

8. Final locking driver

9

9. Trial inserter

10

10. ReConnect cages

11

11. Final locking driver nut

12

12. Trials

13

13. Clamps

14

14. Clips

Website: www.ispine.co.za • Address: Mulberry Hill Office Park, Unit 10,Broadacres Drive, Dainfern, Midrand

Tel: +27 86 147 7463

24 Hour Emergency Number: +27 82 881 8929