

CP.eSP

Cervical Prosthesis

SURGICAL TECHNIQUE

Distribuidor exclusivo em Portugal:



FH ORTHOPEDICS®

SURGICAL TECHNIQUE

CP-ESP INDICATIONS

The CP-ESP cervical disc prosthesis is designed for specific indications detailed in the sales literature, such as:
Symptomatic cervical discopathy, defined as (radicular) pain and/or a functional/neurological deficit in the neck the arm with at least one of the following pathologies confirmed by imaging (computerised tomography, MRI or radiography) and having resisted medical treatment for at least 6 months.

- Herniated nucleus pulposus
- Spondylitis (defined by the presence of osteophytes)
- Radicular compression
- Discal hernia
- Nerve compression



fig. 1

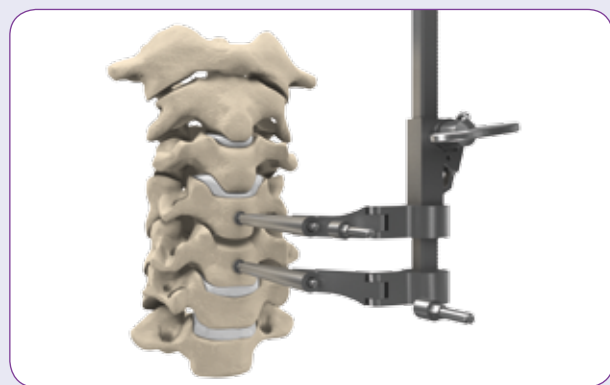


fig. 2



fig. 3

1 – POSITIONING THE PATIENT

Check that the patient's cervical spine is firmly supported, using a roll cushion that is padded, but rigid enough. If the procedure is at the C6-C7 level, check that the shoulders do not hinder monitoring using the C-arm.

The two vertebrae must be completely visible.

2 – APPROACH

Standard discectomy.

Identify the midline using the fluoroscopy and mark it on the upper and lower vertebral bodies.

3 - FIXATION OF THE DISTRACTION SYSTEM

The patient's anatomy will determine the choice of supporting pins: choose the shortest pins.

Implant 1 pin solidly into each of the vertebral bodies that are adjacent to the disc that is being replaced.

Put the Caspar-type distractor in place, stabilise it by screwing the plugs onto the pins, and distract the bones while keeping the pins parallel to one another.

4 - DISCECTOMY (fig. 1-2)

Begin the discectomy using the usual instruments, excise all the disc tissue, and free up the adjacent vertebral surfaces. Limit bone resection as much as possible. (fig. 3)

COMMENTS

Avoid excessive distraction in order to avoid creating tension in the nerve roots and putting too much pressure on the joint surfaces.

The height of the implant must be chosen during preoperative planning and confirmed during the procedure using trial implants.

- Avoid excessive abrasion of the vertebral surfaces. Excessive abrasion increases the risk of implant movement and ossification of the intravertebral space.

- The unciform processes must be preserved. If necessary, they can be repaired.

- Check that all cartilaginous tissue has been totally removed from the surfaces of the vertebral bodies. Remaining cartilage might prevent the implant from adhering to the bone and reduce the quality of the biological fixation.

- Expose the posterior longitudinal ligament to remobilise the segment. If needed for decompression, the posterior longitudinal ligament can be resected.



fig. 4

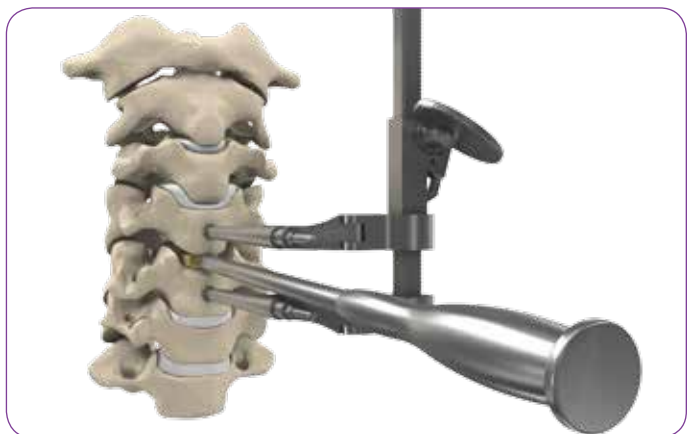


fig. 5



fig. 6

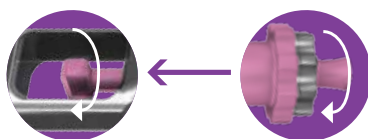


fig. 7

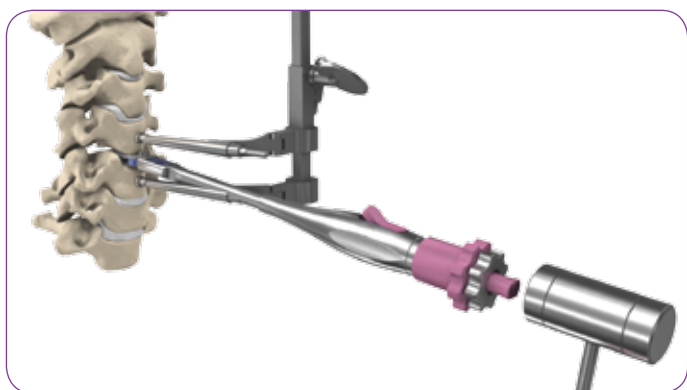


fig. 8

5- TRIALS

Position the trial implant to check the position on the unci.

Align the trial implant with the midline and move it into the disc space while monitoring its position using the C-arm. Ideally, the trial implant should be aligned with the posterior edge of the vertebral bodies and centred with the midline. Release the distraction to determine the optimal height; ensure that the implant is not too thick. The height of the trial implant must take into account the height of the healthy, adjacent discs. Check the position of the trial implant with the image intensifier using a lateral view. (fig. 4-5)

Note: the positioning trial implants are exactly the same size as the final CP ESP implants without the spikes (height of 0.5 mm on either side of the implant).

6- INSERTION OF THE FINAL IMPLANT

Open the implant's sterile double packaging and attach the holder-impactor to the single-use radiotransparent holder piece attached to the CP ESP disc. (fig. 6-7)
Check the orientation of the implant (the rounded side of the disc should be up).

While monitoring the position of the implant with the image intensifier using a lateral view, insert the CP ESP implant in until it reaches the posterior edge of the vertebral body.

When placed against the anterior wall, the holder stop enables the implant to be moved forward into the disc space one millimeter at a time (1 turn of the knob equals 1 mm that the stop is moved back). (fig. 8-9)

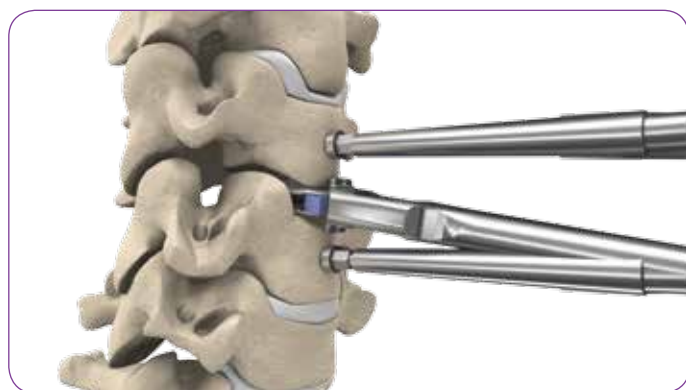
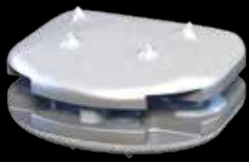


fig. 9



Detach the single-use fixation piece by manoeuvring the holder trigger and making a quarter-turn with the central stem all while maintaining slight pressure on the ESP CP implant.

The holder can then be removed. (fig. 10)

The distractor is released and the single-use tip is removed from the implant using the specific clips. (fig. 11)

Remove the plugs from the pins, then the distractor, then finally the pins. (fig. 12)

NOTE

It is possible to modify the position of the final implant if necessary, or even to remove it using the clips available in the instruments kit.

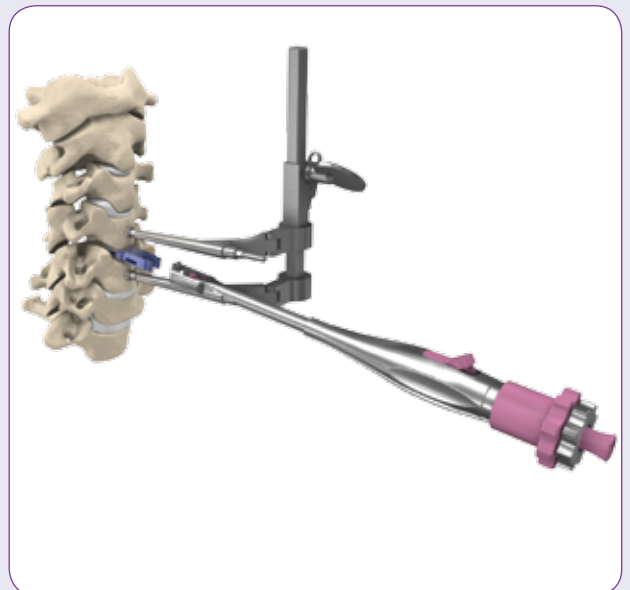


fig. 10



fig. 11



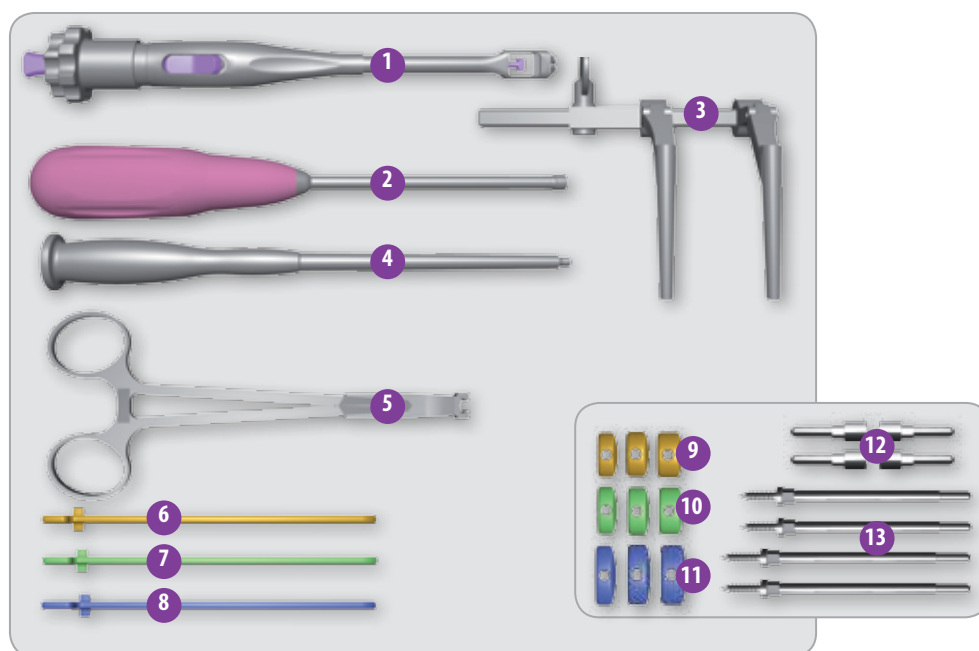
fig. 12



IMPLANTS REFERENCES

Reference	Designation
264363	CP-ESP Prosthesis Size 1 (13X15) - H5
264364	CP-ESP Prosthesis Size 1 (13X15) - H6
264365	CP-ESP Prosthesis Size 1 (13X15) - H7
264366	CP-ESP Prosthesis Size 2 (14X17) - H5
264367	CP-ESP Prosthesis Size 2 (14X17) - H6
264368	CP-ESP Prosthesis Size 2 (14X17) - H7
264369	CP-ESP Prosthesis Size 3 (15X20) - H5
264370	CP-ESP Prosthesis Size 3 (15X20) - H6
264371	CP-ESP Prosthesis Size 3 (15X20) - H7

INSTRUMENTATION



- | | |
|--|---|
| 1. Holder- impactorref. 265 087 | 10. Trial prosthesis 14x17x5.....ref. 265 081 |
| 2. Pins Screwdriver.....ref. 265 077 | Trial prosthesis 14x17x6.....ref. 265 082 |
| 3. Caspar retractor.....ref. 265 073 | Trial prosthesis 14x17x7.....ref. 265 083 |
| 4. Handle for trial insert.....ref. 266 265 | 11. Trial prosthesis 15x20x5.....ref. 265 084 |
| 5. Extraction clamp.....ref. 265089 | Trial prosthesis 15x20x6.....ref. 265 085 |
| 6. Medio-lateral template S.1.....ref. 266 262 | Trial prosthesis 15x20x7.....ref. 265 086 |
| 7. Medio-lateral template S.2.....ref. 266 263 | 12. Plugs for pinsref. 265 076 |
| 8. Medio-lateral template S.3.....ref. 266 264 | 13. Pins for retractor L. 14mm.....ref. 266 595 |
| 9. Trial prosthesis 13x15x5.....ref. 265 078 | Pins for retractor L. 16mm.....ref. 266 596 |
| Trial prosthesis 13x15x6.....ref. 265 079 | |
| Trial prosthesis 13x15x7.....ref. 265 080 | |

FH ORTHOPEDICS S.A.S

3 rue de la Forêt - F 68990 HEIMSBRUNN
Tél. +33 3 89 81 90 92 / Fax : +33 3 89 81 80 11
e-mail : orthopedie@fhorthopedics.fr
www.fhorthopedics.com

USA, FH ORTHOPEDICS INC.

4118 N. Nashville Ave. - Chicago - IL 60634
Tel.: +1 773 290 1039 / 844-77 FHINC
Fax : +1 (773) 539 9328
info-us@fhorthopedics.com / www.FHortho.com

POLSKA, IMPLANTS INDUSTRIE

Ul. Garbary 95/A6,
61-757 Poznan
Tel : +48 61 863 81 27 / Fax : +48 61 863 81 28
Email : fh.orthopedics@poczta.internetdsl.pl