

Neurosurgery

Cervical disc replacement

Your Cervical Spine

The vertebrae, (the bones that makes spinal column) encircle and protect your spinal cord. These vertebrae are separated by shock-absorbing discs Providing the spine with the flexibility to move. Nerves branching from the spinal cord pass through openings in the vertebrae to other parts of your body.

Why do I need surgery?

As discs lose their water content due to disease or aging, they also lose height, bringing the vertebrae closer together. This results in a weakening of the shock absorption properties of the disc and a narrowing of the openings for the nerves in the sides of the spine. A loss of disc height may cause the formation of bone spurs, which can push against your spinal cord and/or nerves.

In the case of a ruptured disc in the cervical spine, it can cause pressure on one or more nerve roots (known as nerve root compression) or on the spinal cord, resulting in pain and other symptoms in the neck and arms. Living with this pain or weakness and tingling in the arms can be disabling.



Disc degeneration

With your doctor's advice, you may have already tried different treatments that did not help with your pain or other symptoms. Or your doctor may think that without surgery, there could be permanent damage. Your doctor has recommended that you consider the PRESTIGE® LP Cervical Disc Prosthesis. It allows for movement after surgery, which is different from the usual fusion procedure.

How is this procedure different from a fusion?

A fusion procedure might help with short-term symptoms like neck and arm pain. However, clinical evidence suggests that physical stress to vertebrae involved in a fusion may accelerate disc degeneration elsewhere in your neck. In contrast, the PRESTIGE® LP Cervical Disc Prosthesis replaces the disc removed by the surgeon. The artificial disc is designed to allow motion at the treated level. A plate is attached to the bones to keep them stable until they fuse naturally.

What is involved in a PRESTIGE® LP Cervical Disc System procedure?

This surgery uses a new medical device to replace the damaged or diseased disc between the vertebrae in your neck. The surgeon removes the damaged disk through a cut made in the front of the neck. In its place, your surgeon will prepare a space and insert a PRESTIGE® LP Cervical Disc Prosthesis. The device uses a ball and socket design which is designed to allow for motion to be preserved.

Motion and flexibility are maintained with a non-fusion procedure.

What should I expect from the surgery?

This surgery is meant to relieve symptoms caused by nerve root or spinal cord compression due to a damaged disc. The surgery associated with the PRESTIGE® LP Cervical Disc System is designed to allow for motion at the operated disc level, which is different from fusion surgery.

Complications

As with all surgery there are potential risks to be aware of. Please discuss these with your surgeon. Research studies of this procedure have produced the following information:

- Disc prosthesis migration was noted in 2 in 100 patients undergoing prosthetic cervical disc implant, although no migration was greater than 3.5 mm from initial implant site.
- Re-intervention was required in 3 in 100 patients, two patients to treat residual symptoms, and one patient for removal of a haematoma (blood clot).
- Temporary hoarseness may occur in up to 13 in 100 patients
- Moderate dysphagia (swallowing difficulties) in 4 out of 100 patients
- Recurrent laryngeal (voice box) nerve palsy in 4 out of 100 patients

Preparing for surgery

You will be called to attend the neurosurgical pre-admissions clinic before your surgery, to check your overall health. Please tell the staff at this clinic what medicines you are taking and **ask if you should stop taking any medications before surgery.**

- Your hospital stay should be between 2 and 5 days, depending on individual circumstances.
- To make your recovery easier, get your home ready for life after surgery. Place important things within easy reach.
- Remove safety hazards that could make you lose your balance.
- Arrange for someone to help you at home and around the house after surgery.
- Be sure you read and understand this entire booklet. Your surgeon is required to discuss with you the potential risks, as well as benefits, of this surgery.

Preoperative Fasting Instructions:

For morning operations

Food or milk

Black tea/coffee/ squash (not juice)/ Pre-Op carbohydrate drink 6:30 am

Water

Stop taking at:

2:30 am

Arrival to hospital

Please do not chew gum on the day of surgery

For afternoon operations

Food or milk

Black tea/coffee/ squash (not juice)/ Pre-Op carbohydrate drink 11:00 am

Water

Stop taking at:

7:30 am

Arrival to hospital

Please do not chew gum on the day of surgery

After surgery

Ask your surgeon about your specific recovery plan after the surgery. It is important to follow your doctor's instructions carefully to recover from surgery as quickly as possible and increase your chances of a successful outcome.

After surgery, your surgeon may refer you to a physiotherapist who will teach you exercises to improve your strength and increase your mobility. The goal of physiotherapy is to help you become active as soon as possible, using safe body movements that protect your neck.

Recovering from pain and surgery is an ongoing process. How fast you recover depends on your commitment to working closely with your physiotherapist, and moving and exercising correctly, as recommended by your surgeon.

A postoperative care booklet is available. Please ask for this from the ward staff or at the hospital's Health Information Centre if you are not given a copy before you are discharged.

Your role in recovery

The ongoing health of your neck really depends on you. Always follow your surgeon's recommendations, including regular visits to your physiotherapist. Remember to move and exercise properly as you return to a more active lifestyle. Good body mechanics keep your spine well aligned and reduce pain, but maintaining a safe, balanced position may require some changes in how you go about daily activities. For example, you may need to learn different ways of standing, sitting, or lifting to avoid re-injuring your neck.

You and your surgeon will continue to work together during your recovery. Before you leave the hospital, your surgeon may schedule follow-up visits. They can evaluate your progress, advise you about your activity level, and adjust any medication, if necessary. Sometimes your doctor may recommend follow-up tests to make sure you are healing properly.

On discharge you will be advised about wound care.

It is recommended:

- you do not get the wound wet for a least 5 days after the procedure.
- You will not be able to drive for at least 6 weeks after your operation.
- It is recommended you do not lift any heavy objects until you have been seen by the consultant at your follow up meeting.

If you need any further information or clarification, please contact Ward 43:
Tel 024 7696 8240/5330 or via the switchboard on 024 7696 4000

References

1. Hilibrand AS, Robbins M. Adjacent segment degeneration and adjacent segment disease: the consequences of spinal fusion? Spine J 2004; Nov-Dec;4(6 Suppl):190S-194S. Review.
2. NATIONAL INSTITUTE FOR CLINICAL EXCELLENCE
INTERVENTIONAL PROCEDURES PROGRAMME Interventional procedures overview of prosthetic intervertebral disc replacement of the cervical spine. February 2005.

Patient Information

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The Trust has access to interpreting and translation services. If you need this information in another language or format, please contact 024 7696 5330 and we will do our best to meet your needs.

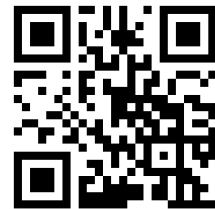
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