

PATIENT INFORMATION

Anterior Cervical Discectomy and Fusion

ACDF

A neck operation to remove a damaged disc, relieve pressure on the spinal cord or nerves, and stabilise the operated level.

Your procedure at a glance

Approach Small incision at the front of the neck	Implant PEEK interbody cage or spacer
Typical stay Approximately 2-3 days	Metal fixation Usually not required for a suitable single-level procedure
Neck collar Only when specifically required; not used routinely	Clinic review Usually 1-2 weeks after surgery

Why is ACDF performed?

ACDF may be recommended when a cervical disc, bone spur or thickened ligament is pressing on a nerve root or the spinal cord. Symptoms may include:

- Pain travelling from the neck into the shoulder, arm or hand
- Numbness or tingling in the arm or hand
- Weakness of the arm or hand
- Loss of hand dexterity, poor balance or difficulty walking
- Spinal cord compression, known as cervical myelopathy

The main aim is to relieve pressure and prevent further neurological deterioration. Arm pain often improves early. Numbness, weakness, balance problems or spinal cord-related symptoms may recover more slowly and may not resolve completely.

1. Before your operation

Preoperative assessment

You may have blood tests, an ECG, chest imaging when required, a review of your MRI or CT scans, and an anaesthetic assessment. Additional investigations may be arranged depending on your health.

Please tell the team

Inform us about heart or lung disease, diabetes, kidney disease, bleeding problems, previous neck surgery, medication or material allergies, dental problems, or any recent fever, cough, infection or skin wound.

Medication

Bring an up-to-date medication list. Blood-thinning medicines, antiplatelet medicines, some diabetes medicines, supplements and traditional preparations may need adjustment. Do not stop prescribed medication unless instructed by your treating team.

Smoking and nicotine

Smoking and nicotine interfere with wound healing and spinal fusion. Stopping before and after surgery is strongly advised.

Fasting

Follow the hospital instructions about when to stop eating and drinking. This is essential for safe anaesthesia.

Planning for discharge

Arrange for a responsible adult to take you home and assist during the early recovery period. Bring your current medicines and relevant medical records to hospital.

Preoperative checklist

- ☐ I have followed the fasting instructions
- ☐ I have confirmed which medicines to take or stop
- ☐ I have informed the team of allergies and medical conditions
- ☐ I have arranged transport and help at home
- ☐ I have brought my scans, medication list and relevant documents

2. During the operation

Anaesthesia and positioning

The operation is performed under general anaesthesia. You will be asleep throughout. You will lie on your back with your neck supported in a controlled position.

Anterior approach

A small incision is made at the front or side of the neck, usually along a natural skin crease. The muscles, windpipe, food passage and blood vessels are gently moved aside to reach the cervical spine. The correct level is confirmed using imaging.

Discectomy and decompression

The damaged disc is removed. Disc material, bone spurs or thickened ligament compressing the spinal cord or nerve roots are carefully removed.

PEEK interbody cage

A PEEK interbody cage or spacer is placed into the disc space. PEEK is a strong medical-grade polymer. The cage restores disc height, supports alignment and provides a framework for fusion between the adjacent vertebrae.

Single-level fixation

For a suitable single-level ACDF, the implant may provide sufficient stability without an additional metal plate or separate metal fixation. The final technique depends on your anatomy, bone quality and the findings during surgery.

Wound drain

A small drain is usually placed to remove blood or fluid from the wound. It is commonly removed within the first one or two days, once the drainage has reduced.

3. After the operation

Monitoring

In the recovery area and ward, the team will monitor your breathing, blood pressure, limb strength and sensation, swallowing, wound and drain output.

Expected symptoms

It is common to have wound discomfort, neck stiffness, pain between the shoulder blades, a sore throat, mild swallowing discomfort or temporary hoarseness. Residual tingling or numbness may take time to improve.

Eating and drinking

You will normally begin with small amounts of water and progress to fluids, soft foods and a normal diet when swallowing is safe.

Mobilisation

You will be encouraged to sit out of bed and begin walking as soon as it is safe. Early mobilisation reduces stiffness, chest complications and blood-clot risk.

Neck collar

A neck collar is not routinely used. It may be prescribed selectively depending on bone quality, stability, surgical findings or comfort. Do not purchase or wear a collar unless advised.

Drain and wound

The wound drain is removed before discharge when drainage is satisfactory. Keep the dressing clean and dry and follow the individual wound-care instructions provided by the ward.

Tell the nursing or medical team immediately if you have increasing neck swelling, difficulty breathing, inability to swallow saliva, choking when drinking, or new weakness.

Discharge from hospital

Most patients are discharged approximately 2-3 days after surgery. The exact timing depends on swallowing, mobility, pain control, drain removal, neurological condition and general medical fitness.

Before discharge, you should usually be able to:

- Walk safely
- Eat and drink adequately
- Swallow safely
- Pass urine normally
- Control pain with oral medication
- Manage basic personal care with any necessary support

You should not drive yourself home.

Recovery at home

Activity

Take regular short walks and increase the distance gradually. Avoid strenuous exercise, heavy lifting, forceful pushing or pulling, and sudden or extreme neck movements during the early recovery period.

Driving

Do not drive until you can comfortably and safely turn your head, perform an emergency stop, and are no longer taking medicines that cause drowsiness. Follow your surgeon's advice and check your motor insurer's requirements.

Return to work

Timing depends on your recovery and occupation. Office-based work may resume earlier than heavy manual work. A gradual return or modified duties may be recommended.

Medication

Take medication exactly as prescribed. Pain medicines can cause drowsiness, nausea, dizziness or constipation. Do not drive while affected by sedating medication.

Wound care

Inspect the wound daily. Do not apply creams, powders, ointments or traditional preparations unless approved by your surgical team.

Follow-up

Your first clinic review is usually 1-2 weeks after surgery.

At this appointment, your surgeon will assess the wound, swallowing, voice, neck and arm symptoms, strength and sensation, walking, medication requirements and activity level. Further appointments or X-rays may be arranged to assess spinal alignment, implant position and fusion.

Possible risks and complications

Every operation carries risks. Your surgeon will discuss the risks relevant to your condition. These may include:

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| • Bleeding or a collection of blood in the neck | • New or worsening weakness, numbness or paralysis |
| • Wound infection | • Persistent neck or arm symptoms |
| • Temporary or persistent swallowing difficulty | • Failure of fusion or implant settling, movement or failure |
| • Temporary or persistent hoarseness or voice change | • Degeneration at an adjacent spinal level |
| • Injury to a nerve, the spinal cord, food passage, windpipe or blood vessel | • Blood clots, chest infection or anaesthetic complications |
| • Leakage of spinal fluid | • Need for further surgery |

SEEK URGENT MEDICAL ATTENTION

- Difficulty breathing or rapidly increasing neck swelling
- Inability to swallow saliva or severe worsening difficulty swallowing
- New weakness or numbness in an arm or leg
- Loss of bladder or bowel control
- Persistent wound bleeding, fluid leakage, pus or spreading redness
- Fever associated with worsening wound pain or discharge
- Chest pain, sudden breathlessness, coughing blood or painful calf swelling

Breathing difficulty or rapidly increasing neck swelling after anterior cervical surgery is an emergency. Call emergency medical services immediately.

Important note

This booklet provides general information and does not replace individual medical advice. Your operation and recovery may differ according to your diagnosis, medical condition, imaging and surgical findings. Always follow the specific instructions given by your neurosurgeon and treating team.

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