



# DR DAVID ROYTOWSKI

## NEUROSURGEON

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## Anterior Cervical Discectomy and Fusion for Cervical Radiculopathy or Cervical Myelopathy (ACDF)

### About your condition

The pressure from your bulging disc(s) might be causing your pain, numbness or weakness.

One or all of your limbs could be affected. Pressure from the disc pressing on the spinal cord, results in the condition is called a cervical myelopathy; and if the pressure is mostly on a nerve root, the condition is termed cervical radiculopathy.

Following a thorough history and clinical examination, we perform an MRI scan to help confirm the diagnosis.

Some patients will have symptom resolution without requiring surgery - Not all, these patients may benefit from an ACDF.

### What is the name of the operation and what does it do?

It's most commonly referred to as ACDF operation and it's designed to remove a herniated disc or boney outgrowth from causing pressure on the spinal cord or nerve roots.

**Anterior** – the operation is performed from the front of the neck in one of the neck folds

**Cervical** – refers to the neck region of the spine

**Discectomy** – removal of the intervertebral disc

**Fusion** – replacement of the disc with a firm substance that allows the bones to fuse together

This operation has a high success rate. Approximately 90 – 95% of people will experience relief of symptoms of arm pain. Spinal cord symptoms are relieved in 60% of cases with 30% remaining stable and 10% may continue to deteriorate. Fewer than 1 in 100 people will feel worse following the surgery.

## Before your operation

You will have met with Dr. Roytowski, and have had the clinical examination along with explanation of the diagnosis and the planned surgery.

Please ask any questions about the procedure and feel free to discuss any concerns that you may have.

Please advise of any medication that you may be taking and any medical conditions that you suffer from.

It is important to inform your team if you have been taking:

- Aspirin
- Warfarin
- Clopidogrel
- Or any other medication which may thin your blood

An ACDF requires a general anesthesia – you will be asleep for the procedure, awake once it is complete and not remember any part whatsoever.

On the morning before the procedure you will meet your anesthetist.

Most people who have this type of procedure will be admitted on the day of surgery. The anesthetist will advise you when to stop eating and drinking; this is usually from midnight the day before the operation.

## The team involved in your care

In addition to your neurosurgeon, there are a number of other people involved in your operative care:

**Anesthetist:** It's the anesthetist who will ensure you enjoy a deep sleep and will continually monitor you throughout the operation. You will meet the anesthetist on the morning of your operation so that you can discuss any concerns you may have.

**Medical physician:** After your operation our specialist physician will manage your daily care until you are well enough to be discharged. The physician is your first port-of-call should you require any assistance, or have any concerns.

**Ward nurse:** The nurse will make a record of your personal details and take your blood pressure, temperature and pulse. They will also look after your day-to-day needs and give you and your family support during your hospital stay.

**Physiotherapist:** A vital member of our team is the physiotherapist – it is their key duty to ensure you get safely back up onto your feet and back to normal activities.

## On the days prior to your operation

### *Arriving and getting booked in*

On the day before your surgery you will need to go to reception and you will be guided to the surgery ward. The nurse will take you to your bed and complete all the necessary checks, including any blood tests. Please ensure that you do not eat or drink after midnight the day prior to your operation.

## *Allergies*

If you are allergic to any medications (such as penicillin or iodine) or to any materials or substances (like latex or metal), you must tell the nurse and surgeon before the operation so we can take adequate precautions.

## *Medications*

It's important you let the anesthetist, surgeon and nurse know if you are taking any regular medications so that they can make adequate preparations for your operation. Some medications (including aspirin, warfarin or clopidogrel) may make your blood thin and result in you experiencing excessive bleeding during the operation. We may ask you to stop taking these medications a few days prior to your operation to allow their effects to wear off. You will be able to take your blood pressure tablets on the day of surgery, but please discuss it with your surgeon or any member of staff first.

## *Consent*

Your surgeon or a member of their team will discuss your operation with you including all the potential risks involved. Any alternatives to surgical treatment and expected benefits of the operation will also be discussed. It's important that you understand the benefits and risks involved in the operation before you sign your consent. If you have any questions or concerns, please ask the surgeon before your operation.

## *How long will the operation take?*

The operation usually takes about two hours-and-a-half from when you're anaesthetized to when you wake up. You will *usually* be in recovery for about an hour while you wake up and will stay with us in the wards for around three to four days.

## **Potential risks**

The operation to treat prolapse of the cervical disc is a very safe procedure and serious complications are extremely rare. As with any operation there are potential risks. For this surgery the most significant risks are:

- Blood loss and the need for transfusion: This type of surgery typically has very little blood loss and it is unlikely that you will require a blood transfusion.
- There is a small risk (less than 1% or 1 in 100) of damage to the spinal cord or nerve root. If this occurs, you might notice an increase in numbness or weakness in your arm or legs.
- The risk of paralysis involving the legs, arms or both is very small and is less than 1%.
- There is a small risk of wound infection (less than 1%) that can usually be treated with a short course of antibiotics. Antibiotics are given at the start of surgery to help prevent infection.
- Post-operative neck pain can be troublesome for some patients, but this normally settles down over the first three to four weeks after the operation.
- If your affected disc is low in the neck (called C5/6, C6/7), there is a risk of developing a hoarse voice after the operation; this is due to handling of the laryngeal nerve during surgery. This is permanent in 1% (1 in 100) of patients.
- There may be temporary problems with swallowing following this operation.
- The risk of a blood clot in the wound that requires a second operation to remove it is between 1 and 2%.

- Patients who have developed a symptomatic prolapsed disc in their neck that has been treated by surgery have up to a 20% risk of developing a further symptomatic prolapsed disc next to the area within 10 years of the first original operation.
- Cerebral spinal fluid leaks: During the surgery the covering over the spinal cord may tear and cause a leakage of spinal fluid. Typically the tear is repaired during the surgery.
- It is normal to experience discomfort when you swallow for a few days after the operation.

### **What are the risks of general anesthesia?**

Luckily these days' serious problems are uncommon.

The risk to you as an individual will depend on whether you have any other illness, personal factors (such as smoking or being overweight) or surgery which is complicated, long or performed in an emergency.

### ***Very common (1 in 10 people) and common side effects (1 in 100 people)***

- Feeling sick and vomiting after surgery
- Sore throat
- Dizziness, blurred vision
- Headache
- Bladder problems
- Damage to lips or tongue (usually minor)
- Itching
- Aches, pains and backache
- Pain during injection of drugs
- Bruising and soreness
- Confusion or memory loss

### ***Uncommon side effects and complications (1 in 1000 people)***

- Chest infection
- Muscle pains
- Slow breathing (depressed respiration)
- Damage to teeth
- An existing medical condition getting worse
- Awareness (becoming conscious during your operation)

### ***Rare (1 in 10,000 people) and very rare (1 in 100,000 people) complications***

- Damage to the eyes
- Heart attack or stroke
- Serious allergy to drugs
- Nerve damage
- Death

## After your operation

### *Waking up after the operation*

Immediately after the operation you will be taken to the recovery room where you will be monitored carefully as you wake up. You will be made comfortable, given painkillers, and allowed a little time to wake up from the anesthetic. Expect to be asked to move your arms and legs and answer questions such as “what day is it?” or “where are you?”.

This may all seem strange or frustrating but it’s an important part of assessing how well you are recovering from your operation. You will usually stay in recovery for about an hour, until you are awake.

You will spend the first night in the High-care/ ICU where the team can keep a close eye upon you, and likely be transferred through to the general ward the next day. Usually by day three you will be up on your feet and ready for discharge.

### *Intravenous infusion*

You will have an intravenous infusion (a drip), to replace the fluids you are unable to drink whilst you’re nil by mouth. Once you are drinking normally, this will be removed.

### *Calf-pumps*

You will have sequential pressure pumps placed over your calves and feet – this is to prevent you from developing blood clots in the lower limbs, which could travel to the lungs. These may cause some pressure over the legs but will be removed as soon as you are walking again.

### *Urinary catheter*

You will have a catheter inserted while anesthetized to allow for accurate evaluation of urine passed during and after the operation. This is normally kept in for about 1 day.

## Follow-up appointments

You will need to attend a follow-up appointments after surgery, this is usually planned for about six-weeks after your discharge from hospital.