Patient information and consent to anterior cervical discectomy for cervical myelopathy (pressure on the spinal cord) or cervical radiculopathy (pressure on a nerve root)

**Key messages for patients**

- Please read your admission letter carefully. It is important to follow the instructions we give you about not eating or drinking or we may have to postpone or cancel your operation.
- Please read this information carefully, you and your health professional will sign it to document your consent.
- It is important that you bring the consent form with you when you are admitted for surgery. You will have an opportunity to ask any questions from the surgeon or anaesthetist when you are admitted. You may sign the consent form either before you come or when you are admitted.
- Please bring with you all of your medications and its packaging (including inhalers, injections, creams, eye drops, patches, insulin and herbal remedies), a current repeat prescription from your GP, any cards about your treatment and any information that you have been given relevant to your care in hospital, such as x rays or test results.
- Laxatives and painkillers may be required after your hospital stay; please ensure you have appropriate supplies at home.
- Take your medications as normal on the day of the procedure unless you have been specifically told not to take a drug or drugs before or on the day by a member of your medical team. If you have diabetes please ask for specific individual advice to be given on your medication at your pre-operative assessment appointment.
- If you have any questions or concerns about this procedure please call the Clinical Nurse Practitioner or Secretary for your consultant. Any concerns regarding the organisation of your admission date may be dealt with by the Neuroscience Admissions Office on 01223 217100.

After the procedure we will file the consent form in your medical notes and you may take this information leaflet home with you.

**Important things you need to know**

Patient choice is an important part of your care. You have the right to change your mind at any time, even after you have given consent and the procedure has started (as long as it is safe and practical to do so). If you are having an anaesthetic you will have the opportunity to discuss this with the anaesthetist, unless the urgency of your treatment prevents this.

We will also only carry out the procedure on your consent form unless, in the opinion of the health professional responsible for your care, a further procedure is needed in order to save your life or prevent serious harm to your health. However, there may be procedures you do not wish us to carry out and these can be recorded on the consent form. We are unable to guarantee that a particular person will perform the procedure. However the person undertaking the procedure will have the relevant experience.

All information we hold about you is stored according to the Data Protection Act 1998.
About Cervical Discectomy

The pressure from your prolapsed disc(s) might be causing you pain, numbness or weakness and sometimes a disturbance of bladder function. Either the arms or the legs or all limbs may be affected. If the disc is pressing on the spinal cord, the condition is called a cervical myelopathy; and if the pressure is mostly on a nerve root, the problem is termed cervical radiculopathy. The actual diagnosis is confirmed by a magnetic resonance imaging (MRI) scan. Not all patients with those conditions require surgery; in some patients, symptoms can improve spontaneously without treatment.

Intended benefits

The success rate for this operation is high. In those people who are experiencing pain in their neck and arm 90 to 95% (90 to 95 in 100 people) can expect relief from their arm pain. If the disability you have is a result of pressure on the spinal cord about 60% (60 in 100) of people can expect improvement, 30% (30 in 100) will find their condition stabilises and less than 10% of them find that their condition continues to deteriorate. Less than 1% (1 in 100) will feel worse as a direct consequence of the operation.

Who will perform my procedure?

This procedure will be performed by a consultant neurosurgeon or consultant orthopaedic spinal surgeon or neurosurgical specialist registrar supervised by a consultant.

Before your procedure

Most patients attend a pre-admission clinic, when you will meet the consultant neurosurgeon or specialist registrar and the clinical nurse practitioner. At this clinic, we will ask for details of your medical history and carry out any necessary clinical examinations and investigations. Please ask us any questions about the procedure, and feel free to discuss any concerns you might have at any time.

We will ask if you take any tablets or use any other types of medication either prescribed by a doctor or bought over the counter in a pharmacy. Please bring all your medications and any packaging (if available) with you. Please tell the ward staff about all of the medicines you use. If you wish to take your medication yourself (self-medicate), please ask your nurse. Pharmacists visit the wards regularly and can help with any medicine queries.

We need to know if you are taking any of the following tablets as they thin the blood which may cause excessive bleeding at the time of surgery:

- Aspirin
- Warfarin
- Clopidogrel
- Or any other medication which may thin your blood
If to your knowledge the answer to any of the following is YES, it is important that you tell us:

- Have you ever received Human Growth Hormone;
- Have you had brain surgery prior to 1992 or;
- Has anyone in your family been diagnosed with CJD?

A positive answer will not prevent any treatment, it will however allow us to take Infection Control advice and plan your procedure so as to minimise any risks.

This procedure involves the use of general anaesthesia. We explain about the different types of anaesthesia or sedation we may use at the end of this leaflet. You will see an anaesthetist before your procedure.

Most people who have this type of procedure will be admitted on the day of surgery. We will advise you when to stop eating and drinking; this is usually from midnight the day before the operation. Your doctor will discuss the length of stay with you.

**During the procedure**

A small incision will be made on the front of your neck, usually in a skin crease so it will leave less of a scar. The cervical disc is then removed, to relieve pressure on the spinal cord and nerves. Sometimes we replace the disc with a bone graft, synthetic cage or titanium plate (instrumentated fusion).

**After the procedure**

Once your surgery is completed you will usually be transferred to the recovery ward where you will be looked after by specially trained nurses, under the direction of your anaesthetist. The nurses will monitor you closely until the effects of any general anaesthetic have adequately worn off and you are conscious. They will monitor your heart rate, blood pressure, oxygen levels and limb movements. You may be given oxygen via a facemask, fluids via your drip and appropriate pain relief until you are comfortable enough to return to your ward.

**Eating and drinking.** After this procedure, you should not have anything to eat or drink until you medical team considers it to be safe, this is usually about two hours after the operation.

**Getting about after the procedure.** We will help you to become mobile as soon as possible after the procedure. This helps improve your recovery and reduces the risk of certain complications. You should be able to get out of bed within a few hours of your operation. After the operation, any pain you were experiencing in your arm should get better. Other symptoms such as numbness, clumsiness, poor balance and weakness usually take much longer to improve. Some patients who have had this operation develop a new pain between their shoulder blades.
Leaving hospital. Most people who have had this type of procedure will be able to go home on the day of surgery or the next day. A longer stay might be necessary if you are elderly or have a major disability before surgery.

Resuming normal activities including work. Once you are home, you should gradually increase your activity towards normal levels. You can resume driving when you feel comfortable; this is provided that you were considered safe to drive by a doctor before the operation.

Special measures after the procedure: Your wound will be closed with absorbable stitches. If you have any concerns about the healing of the wound (redness, swelling or discharge) you may see either your GP or practice nurse. If there are persistent problems please contact the clinical nurse practitioner for your consultant and we would be happy to review you.

Check-ups and results: You will normally be reviewed in the outpatient clinic at three months after discharge. In most patients, the bones next to the operated disc fuse (join) together after this operation. This is a normal result and you should not notice any limitation in your neck movement. If you have had a cage or plate inserted at the time of the operation it is sometimes necessary to organise some x-rays prior to you being discharged and at your subsequent outpatient appointments.

Significant, unavoidable or frequently occurring risks of this procedure

- The operation to treat prolapse of the cervical disc has been widely practised since the 1950s. It is a very safe procedure and serious complications are extremely rare.
- It is normal to experience discomfort when you swallow for a few days after the operation.
- 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%) which can usually be treated with a short course of antibiotics.
- 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% (20 in 100) risk of developing a further symptomatic prolapsed disc next to the area within 10 years of the first original operation.

General risks associated with all major operations and from being hospitalised: eg bleeding, infection, blood clots.

Alternative procedures that are available
The alternative to this surgery is to decide not to have surgery.

Information and support
You can contact the clinical nurse practitioner via main switchboard or via the neurosurgical secretary if you have any further concerns.

Anaesthesia
Your operation will be carried out under general anaesthetic.
Anaesthesia means ‘loss of sensation’. There are three types of anaesthesia: general, regional and local. The type of anaesthesia chosen by your anaesthetist depends on the nature of your surgery as well as your health and fitness. Sometimes different types of anaesthesia are used together.

Before your operation
Before your operation you will meet an anaesthetist who will discuss with you the most appropriate type of anaesthetic for your operation, and pain relief after your surgery. To inform this decision, he/she will need to know about:

• your general health, including previous and current health problems
• whether you or anyone in your family has had problems with anaesthetics
• any medicines or drugs you use
• whether you smoke
• whether you have had any abnormal reactions to any drugs or have any other allergies
• your teeth, whether you wear dentures, or have caps or crowns.

Your anaesthetist may need to listen to your heart and lungs, ask you to open your mouth and move your neck and will review your test results.

Pre-medication
You may be prescribed a ‘premed’ prior to your operation. This is a drug or combination of drugs which may be used to make you sleepy and relaxed before surgery, provide pain relief, reduce the risk of you being sick, or have effects specific for the procedure that you are going to have or for any medical conditions that you may have.
Not all patients will be given a premed or will require one and the anaesthetist will often use drugs in the operating theatre to produce the same effects.

Moving to the operating room or theatre
You will usually change into a gown before your operation and we will take you to the operating suite. When you arrive in the theatre or anaesthetic room and **before starting your anaesthesia, the medical team will perform a check of your name, personal details and confirm the operation you are expecting.**

Once that is complete, monitoring devices may be attached to you, such as a blood pressure cuff, heart monitor (ECG) and a monitor to check your oxygen levels (a pulse oximeter). An intravenous line (drip) may be inserted. If a regional anaesthetic is going to be performed, this may be performed at this stage. If you are to have a general anaesthetic, you may be asked to breathe oxygen through a face mask.

**General anaesthesia**
During general anaesthesia you are put into a state of unconsciousness and you will be unaware of anything during the time of your operation. Your anaesthetist achieves this by giving you a combination of drugs.

While you are unconscious and unaware your anaesthetist remains with you at all times. He or she monitors your condition and administers the right amount of anaesthetic drugs to maintain you at the correct level of unconsciousness for the period of the surgery. Your anaesthetist will be monitoring such factors as heart rate, blood pressure, heart rhythm, body temperature and breathing. He or she will also constantly watch your need for fluid or blood replacement.

**Regional anaesthesia**
Regional anaesthesia includes epidurals, spinals, caudals or local anaesthetic blocks of the nerves to the limbs or other areas of the body. Local anaesthetic is injected near to nerves, numbing the relevant area and possibly making the affected part of the body difficult or impossible to move for a period of time. Regional anaesthesia may be performed as the sole anaesthetic for your operation, with or without sedation, or with a general anaesthetic. Regional anaesthesia may also be used to provide pain relief after your surgery for hours or even days. Your anaesthetist will discuss the procedure, benefits and risks with you and, if you are to have a general anaesthetic as well, whether the regional anaesthesia will be performed before you are given the general anaesthetic.

**Local anaesthesia**
In local anaesthesia the local anaesthetic drug is injected into the skin and tissues at the site of the operation. The area of numbness will be restricted. Some sensation of pressure may be present, but there should be no pain. Local anaesthesia is used for minor operations such as stitching a cut, but may also be injected around the surgical site to help with pain relief. Usually a local anaesthetic will be given by the doctor doing the operation.
Sedation

Sedation is the use of small amounts of anaesthetic or similar drugs to produce a ‘sleepy-like’ state. Sedation may be used as well as a local or regional anaesthetic. The anaesthesia prevents you from feeling pain and the sedation makes you drowsy. Sedation also makes you physically and mentally relaxed during an investigation or procedure which may be unpleasant or painful (such as an endoscopy) but where your co-operation is needed. You may remember a little about what happened but often you will remember nothing. Sedation may be used by other professionals as well as anaesthetists.

What will I feel like afterwards?

How you will feel will depend on the type of anaesthetic and operation you have had, how much pain relieving medicine you need and your general health.

Most people will feel fine after their operation. Some people may feel dizzy, sick or have general aches and pains. Others may experience some blurred vision, drowsiness, a sore throat, headache or breathing difficulties.

You may have fewer of these effects after local or regional anaesthesia although when the effects of the anaesthesia wear off you may need pain relieving medicines.

What are the risks of anaesthesia?

In modern anaesthesia, serious problems are uncommon. Risks cannot be removed completely, but modern equipment, training and drugs have made it a much safer procedure in recent years. 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
Equipment failure

Deaths caused by anaesthesia are very rare. There are probably about five deaths for every million anaesthetics in the UK.

For more information about anaesthesia, please visit the Royal College of Anaesthetists’ website: www.rcoa.ac.uk
Information about important questions on the consent form

1 Creutzfeldt Jakob Disease (‘CJD’)
We must take special measures with hospital instruments if there is a possibility you have been at risk of CJD or variant CJD disease. We therefore ask all patients undergoing any surgical procedure if they have been told that they are at increased risk of either of these forms of CJD. This helps prevent the spread of CJD to the wider public. A positive answer will not stop your procedure taking place, but enables us to plan your operation to minimise any risk of transmission to other patients.

2 Photography, Audio or Visual Recordings
As a leading teaching hospital we take great pride in our research and staff training. We ask for your permission to use images and recordings for your diagnosis and treatment, they will form part of your medical record. We also ask for your permission to use these images for audit and in training medical and other healthcare staff and UK medical students; you do not have to agree and if you prefer not to, this will not affect the care and treatment we provide. We will ask for your separate written permission to use any images or recordings in publications or research.

3 Students in training
Training doctors and other health professionals is essential to the NHS. Your treatment may provide an important opportunity for such training, where necessary under the careful supervision of a registered professional. You may, however, prefer not to take part in the formal training of medical and other students without this affecting your care and treatment.

4 Use of Tissue
As a leading bio-medical research centre and teaching hospital, we may be able to use tissue not needed for your treatment or diagnosis to carry out research, for quality control or to train medical staff for the future. Any such research, or storage or disposal of tissue, will be carried out in accordance with ethical, legal and professional standards. In order to carry out such research we need your consent. Any research will only be carried out if it has received ethical approval from a Research Ethics Committee. You do not have to agree and if you prefer not to, this will not in any way affect the care and treatment we provide. The leaflet ‘Donating tissue or cells for research’ gives more detailed information. Please ask for a copy.

If you wish to withdraw your consent on the use of tissue (including blood) for research, please contact our Patient Advice and Liaison Service (PALS), on 01223 216756.
Privacy & dignity

Same sex bays and bathrooms are offered in all wards except critical care and theatre recovery areas where the use of high-tech equipment and/or specialist one to one care is required.

We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site.
For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.
Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.
Consent Form

Patient agreement to investigation or treatment for neurosurgery, spinal surgery or vitreoretinal surgery

Please use ‘Procedure completed’ stamp below on completion:

Interpreter’s statement (if appropriate)

I have interpreted the information to the best of my ability, and in a way in which I believe the patient can understand:

Signed (Interpreter): .................................................. Date: ..................................................

Name (PRINT): ..........................................................

Or, please note the language line reference ID number: ..........................................................

Patient safety – at the heart of all we do
Anterior cervical discectomy

Damage to the spinal cord or nerve root; increase in numbness or weakness in your arm or legs; paralysis involving the legs, arms or both; wound infection; blood clot; neck pain; developing a coarse voice after the operation; temporary swallowing problems; a further symptomatic prolapsed disc.

People experiencing pain in their neck and arm: 90 to 95% can expect relief from the arm pain. People with pressure on the spinal cord: about 60% can expect improvement, 30% will find their condition stabilises and less than 10% will find that their condition continues to deteriorate.

The following information leaflet has been provided:

Anterior cervical discectomy

Version reference and date: CF080 version 8 March 2017

Signed (Health professional): _____________________________ Date: __/__/____

Name (PRINT): _____________________________ Time (24hr): __.:___

Designation: _____________________________ Contact/bleep no: _____________________________
C  Consent of patient/person with parental responsibility

I confirm that the risks, benefits and alternatives of this procedure have been discussed with me and that my questions have been answered to my satisfaction and understanding.

Important: please read the patient information on ‘Consent’ and then put a tick in the relevant boxes for the following questions:

1 Creutzfeldt Jakob disease (CJD)
   a) Have you ever been notified that you are at risk of CJD or variant CJD for public health purposes? If yes, please inform your health professional. □ Yes □ No

   b) Have you had a history of CJD or other prion disease in your family? □ Yes □ No

   c) Have you ever received growth hormone or gonadotrophin treatment? □ Yes □ No

       If yes, please give details below:

       Please specify:

       (i) whether the hormone was derived from human pituitary glands □ Yes □ No

       (ii) the year of treatment

       (iii) whether the treatment was received in the UK or another country □ UK □ Other

   d) Have you ever had surgery on your brain, eye or spinal cord? □ Yes □ No

       If yes, please give details below:

   e) Since 1980, have you had any transfusions of blood or blood components (red cells, plasma, cryoprecipitate or platelets)? □ Yes □ No

       If yes, please answer questions below:

       Have you either:

       (i) received more than 50 units of blood or blood components, □ Yes □ No

       or

       (ii) received blood or blood components on more than 20 occasions □ Yes □ No

       Where possible, please provide the names of all the hospitals where you received blood or blood components:

   In the case of a positive reply to any CJD question, staff should immediately inform Infection Control on ext 3497 (bleep numbers 152-198 or 151-803) and the theatre co-ordinator (24 hour bleep number 152-585); out of hours contact the on call medical microbiologist via the hospital contact centre.

2 Photography, Audio or Visual Recording
   a) I agree to the use of any of the above type of recordings for the purpose of diagnosis and treatment. □ Yes □ No

   b) I agree to unidentified versions of any of the above recordings being used for audit and medical teaching in a healthcare setting. □ Yes □ No

3 Medical Training
   I agree to the involvement of medical and other students as part of their formal training. □ Yes □ No
Use of Tissue

a) I agree that tissue (including blood) not needed for my own diagnosis or treatment can be used and stored for ethically approved research which may include ethically approved genetic research.

b) Where additional clinical information is needed for the purposes of ethically approved research, I agree that relevant sections of my medical record may be looked at by researchers or by relevant regulatory authorities. I give permission for these individuals to have access to my records.

I have listed below any procedures that I do not wish to be carried out without further discussion.

I have read and understood the Patient Information entitled Consent and the above additional information. I agree to the procedure or treatment.

Signed (Patient): .............................................. Date: ...D.D./M.M./Y.Y.Y.Y...

Name of patient (PRINT):

If signing for a child or young person; delete if not applicable.

I confirm I am a person with parental responsibility for the patient named on this form.

Signed .......................................................... Date: ...D.D./M.M./Y.Y.Y.Y...

Relationship to patient:

If the patient is unable to sign but has indicated his/her consent, a witness should sign below.

Signed (Witness): ........................................... Date: ...D.D./M.M./Y.Y.Y.Y...

Name of witness (PRINT):

Address:

Confirmation of consent

Confirmation of consent (where the treatment/procedure has been discussed in advance)

On behalf of the team treating the patient, I have confirmed with the patient that she/he has no further questions and wishes the treatment/procedure to go ahead.

Signed (Health professional): .................................... Date: ...D.D./M.M./Y.Y.Y.Y...

Name (PRINT): .................................................. Job title:

Please initial to confirm all sections have been completed:

Withdrawal of patient consent

☐ The patient has withdrawn consent (ask patient to sign and date here)

Signed (Patient): .............................................. Date: ...D.D./M.M./Y.Y.Y.Y...

Signed (Health professional): .................................... Date: ...D.D./M.M./Y.Y.Y.Y...

Name (PRINT): .................................................. Job title: