Patient Information

Patient information and consent to surgery for unruptured intracranial aneurysms

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.
- **Please call the Clinical Nurse Practitioner on telephone number 01223 256981** if you have any questions or concerns about this procedure or your appointment.

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 surgery for unruptured intracranial aneurysms

- Cerebral aneurysms form where weaknesses of the blood vessels supplying the brain balloon out under pressure. The chance of rupture is related to their size. They may rupture leading to a cerebral haemorrhage.
- Patients in whom the aneurysm has ruptured are sent to hospital as an emergency and are generally very unwell.
- Those patients where the aneurysm is detected before it has ruptured, it is frequently detected by accident. In some patients however, there may be symptoms due the aneurysm reaching a size causing pressure on the surrounding brain and nerves.

Intended benefits
To exclude the aneurysm from the cerebral blood circulation eliminating the chance of rupture. Some symptoms may be improved by removing pressure from the adjacent brain and nerves. Your doctor will discuss this with you in more detail.

Who will perform my procedure?
This procedure will be performed by the consultant or the specialist registrar under the direct supervision of the consultant.

Before your procedure
Most patients attend a pre-admission clinic, when you will meet a neurosurgical SHO (doctor) and 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.

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 need to stay in hospital between two to three days post operatively. Sometimes we predict whether you will need to stay for a longer period than usual – your doctor will discuss this with you before hand were you to decide to have the procedure.

You will need to take any medications as normal. If you are taking drugs which thin the blood then these will need to be stopped prior to your surgery.
You will need to discuss this in detail with your doctor. If you are taking aspirin we would prefer that you continue to do so. If you are taking Clopidogrel (or Plavix) or Warfarin, then stop this one week before surgery. In all instances let your doctors know what medications you are taking.

Hair removal before a procedure
For most operations, you do not need to have the hair around the site of the procedure removed. They will use an electric hair clipper with a single-use disposable head, on the day of the surgery. Please do not shave the hair yourself or use a razor to remove hair, as this can increase the risk of infection. Your healthcare team will be happy to discuss this with you.

During the procedure
- Before your procedure, you will be given the necessary anaesthetic and/or sedation - see below for details of this.
- You will be having a general anaesthetic you will be kept asleep until you reach the recovery room after the procedure.

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 and oxygen levels too. 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.
- When you first wake up, there might be a small probe attached to the side of your head with an elasticated band. This probe monitors the blood supply to the brain, which ensures that the repaired artery remains clear.
- At this time, you might find there is a urinary catheter inserted into your bladder, which allows your urine to drain into a bag. This is a temporary measure to prevent urine becoming retained which can cause your blood pressure to become unstable.
- After this procedure, most people will have a small, plastic tube in one of the veins of their arm. This might be attached to a bag of fluid (called a drip), which feeds your body with fluid until you are well enough to eat and drink by yourself.
- After a few hours, if all the measurements are fine and you have recovered sufficiently from the anaesthetic, you will be returned to the ward where you will continue to be monitored closely for 24 hours. Alternatively; we may continue to monitor you within the high dependency area overnight. This entails being woken up two hourly;
  a) To check your blood pressure and pulse.
  b) To check you level of consciousness (GCS). You will be asked questions, like, what is the time date and place.
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- To check the strength in your arms and legs.
- To check pupil reaction – a torch will be shone gently across your eyes.

After certain major operations you may be transferred to the intensive care unit (NCCU) or high dependency unit (HDU). These are areas where you will be monitored much more closely because of the nature of your operation or because of certain pre-existing health problems that you may have. If your surgeon or anaesthetist believes you should go to one of these areas after your operation, they will tell you and explain to you what you should expect.

**If there is not a bed in the necessary unit on the day of your operation, your operation may be postponed as it is important that you have the correct level of care after major surgery.**

**Eating and drinking.** The day after the operation, if all is well, you are allowed to start to eat and drink.

**Getting about after the procedure.** The day after the operation, if all is well, the monitors, catheters and drains are removed and we will get you out of bed. Early mobilisation helps prevent complications from lying in bed. If you have any mobility problems, we can arrange nursing or physiotherapy help.

**Leaving hospital.** While you are staying with us, the surgical team will visit you every day and can answer any questions you might have about your surgery. On each visit, we will assess your progress and work out the best time for you to be discharged from hospital. Most people are discharged two to three days after the operation. As already mentioned this may be longer. The time that you stay in hospital will depend on your general health, how quickly you recover from the procedure and your doctor’s opinion.

**Resuming normal activities including work.** You will probably need two to four weeks off work or study; please return when you feel comfortable. You must avoid driving and contact the DVLA who will instruct you on this. Gentle exercise (for example, walking) is good but avoid any heavy lifting or straining until you have completely recovered. You may resume sex after two to four weeks.

**Special measures after the procedure:** You will be given more detailed information about any special measures you need to take after the procedure. You will also be given information about things to watch out for that might be early signs of problems (for example, infection).

**Check-ups and results:** We will make arrangements to review you in the outpatient clinic three months after the operation. If all is well, you can be discharged back to the care of your GP.
Significant, unavoidable or frequently occurring risks of this procedure

- There is a small risk of stroke at the time of operation (approximately 3 to 5%). This does depend on the size of the aneurysm. In very large aneurysms the risks can be as high as 10 to 20%. Your surgeon will discuss the individual risks with you.
- The risk of death is around 1% this does depend on the size of the aneurysm.
- All major operations can carry general risks like infection. These will be discussed with you prior to the procedure.
- Infection or seizure.

Alternative procedures that are available

- Intracranial aneurysms can be treated either by means of an open operation – traditional surgical methods, or by the endovascular route whereby a coil is placed within the aneurysm by means of a thin tube passed up through an artery from the groin.
- Both procedures will be fully explained to you. The initial risks are similar. However, some aneurysms are better treated with surgery compared to endovascular treatment, and vice versa. A full discussion of these two procedures will be offered from your treating surgeon.

Information and support

You might be given some additional patient information before or after the procedure, for example, leaflets that explain what to do after the procedure and what problems to look out for. If you have any questions or anxieties, please feel free to ask a member of staff including the Clinical Nurse Practitioner who can be contacted via the Addenbrooke’s switchboard on 01223 245151 and asking them to bleep 152-165.

Anaesthesia

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
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- 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](http://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.

Document history

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To exclude the aneurysm from the cerebral blood circulation eliminating the chance of rupture. Some symptoms may be improved by removing pressure from the adjacent brain and nerves. Your doctor will discuss this with you in more detail.

- There is a small risk of stroke at the time of operation (approximately 3 to 5%). This does depend on the size of the aneurysm. In very large aneurysms the risks can be as high as 10 to 20%. Your surgeon will discuss the individual risks with you.
- The risk of death is around 1% this does depend on the size of the aneurysm.
- All major operations can carry general risks and that can be under change.
- Infection or seizure.

- what the treatment or procedure is likely to involve, the benefits and risks of any available alternative treatments (including no treatment) and any particular concerns of this patient:
Consent Form

Surgery for unruptured intracranial aneurysms

d) any extra procedures that might become necessary during the procedure such as:
   □ Blood transfusion  □ Other procedure (please state)

2 The following information leaflet has been provided:

   Surgery for unruptured intracranial aneurysms

Version, reference and date:  V4, CF380, Doc ID 6993, February 2017
or  □ I have offered the patient information about the procedure but this has been declined.

3 This procedure will involve:
   □ General and/or regional anaesthesia  □ Local anaesthesia  □ Sedation  □ None

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 about this procedure and then put a tick in the relevant boxes for the following questions:

1 Creutzfeldt Jakob disease (CJD)
   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

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 Students in training
   I agree to the involvement of medical and other students as part of their formal training.
   □ Yes  □ No
4 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.

☐ Yes  ☐ No

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.

☐ Yes  ☐ No

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 about this procedure and the above additional information. I agree to the procedure or treatment.

Signed (Patient): .......................................................... Date: ___/___/___
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: ___/___/___
Relationship to patient:

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

Signed (Witness): .......................................................... Date: ___/___/___
Name of witness (PRINT): ..........................................................
Address: 

For staff use only:
Hospital number:
Surname:
First names:
Date of birth:
NHS no: ___ / ___ / ___
Use hospital identification label
Surgery for unruptured intracranial aneurysms

D 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: ..............

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

Please initial to confirm all sections have been completed:

E 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:

F Withdrawal of patient consent

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

Signed (Patient): ........................................... Date: ..............

Signed (Health professional): ........................................... Date: ..............

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