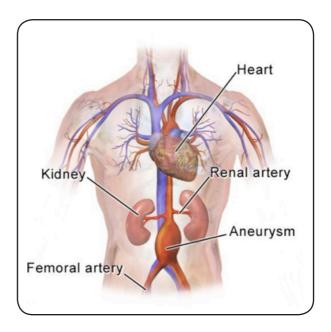




# Anaesthesia For: Open Abdominal Aortic Aneurysm Repair Aortic Bypass Graft Surgery

Information for patients Anaesthetics



# THE AORTA

The aorta is the largest blood vessel in the body. Two main problems can occur with the Aorta:

- The Aorta stretches forming an aneurysm, where the wall of a blood vessel becomes weak and it stretches like a balloon. At some point it may burst (rupture).
- The Aorta narrows and limits or reduces the flow of blood through it.

Both abdominal aortic aneurysm (AAA) and a narrow aorta can be repaired with an open major operation that has significant risks. Some of the surgical risks are covered in the leaflet the surgeon will have given you. What we wish to cover in this leaflet is the risk surrounding your background health and having a general anaesthetic (GA) which you would need for either operation.

### Risk

Risk is a very difficult thing to calculate, both in life and in medicine. The surgeon and anaesthetist will work closely together with you to decide if this operation is right for you.

On average in the UK around 3 in100 people will die as a result of having this planned surgery.

We take this very seriously and so should you - so following various tests we will try to give you an idea of your individual risk. It may be higher or lower.

An aneurysm will not always burst, in fact the smaller aneurysms would be more likely not to burst. The risk of your AAA bursting is dependent on the size and the rate of growth. For this reason sometimes following a full assessment it becomes clear that even though there is a surgical solution to the problem, the risk of operating outweighs the benefit to you as an individual. You are part of this shared decision making process and so it is helpful if you think why you would want to have surgery.

# Sometimes making the decision to go ahead can be complex and this needs time.

If, after considering your options, you decide to go ahead, here is what you can expect from us - and what we expect from you before during and after your hospital stay.

## HOW CAN YOU PREPARE BEFORE THE OPERATION:

There is great evidence that if you make changes even a few weeks before, this will improve your recovery.

**Smoking** - Stopping smoking is the single most important thing you can do to help. Help is available from the hospital and your GP, please ask if you need support. We can help.

**Gentle Exercise** - Walking & cycling will not damage your aneurysm and are recommended to improve your overall fitness for the operation.

**High Blood Pressure** - Get your blood pressure checked and take all blood pressure medications as prescribed.

**High Cholesterol levels** - Eat a healthy balanced diet and try to lose any excess weight. We may start you on a medication to lower cholesterol.

**Diabetes** - With the help of your GP or hospital doctor try to improve your blood sugar levels.

**Reduce Alcohol Intake** - Reducing alcohol intake can help reduce the risk of complications with your surgery. Help is available from the hospital and your GP, please ask if you need support.

## DURING: ON THE DAY

Some patients will be admitted to a ward the night before surgery and some patients will come into hospital on the morning of their operation. We know it is a big ask to come in so early for major surgery the same day, however if you are coming from home:

- Please try to remember to take the medication you have been asked to take.
- And DON'T take any specific medications you have been asked NOT to take

A general anaesthetic needs us to closely monitor you.

#### Standard monitoring and procedures are as follows:

**ECG** - sticky dots placed on your chest to monitor the tiny electrical current of the heart.

**Oxygen Saturation Probe** - small peg placed on the finger or ear that monitors the amount of oxygen in the blood.

**Blood Pressure Cuff** - inflatable sleeve placed on the arm that records your blood pressure every time it goes up and down.

**Venous Cannula** - is a plastic tube that is put in one of your veins (normally on the back of the hand and often referred to as a 'drip'), it is put in with a needle but once in only a plastic tube remains. It is used to give fluids, drugs or blood products.

**Arterial Cannula** - similar to a venous cannula but is placed in one of your arteries (normally at the wrist). It is often held in place with stitches. It is used to measure your blood pressure every time your heart beats and to take blood samples from.

**Intubation** - once the anaesthetist has you deeply asleep they will place a breathing tube in your throat. This normally comes out at the end of the operation when you wake up. Rarely patients may need to go to the intensive care ward and will keep the tube in while you recover more from the anaesthetic and surgery.

**Urinary Catheter** - a tube that is placed in your bladder. This allows urine to drain from your bladder during and after the operation. It is also used by your doctors as a guide to how well your kidneys are working and how much fluid you require if you are not drinking enough after the operation.

#### Procedures that may be required:

**Central Venous Cannula** - this is usually placed in a large vein in the neck and is often referred to as a 'central line'. It is usually inserted once you are under general anaesthetic and it is held in places with stitches. It is used to give certain drugs that cannot be given through a cannula in your hand or arm and can also be used to give fluids and blood products.

#### Complications can occur with central lines.

These include - accidental puncture of a lung, bloodstream infections, bleeding, blood clots and rarely air bubbles can block a blood vessel.

Not all patients will need a central line, the anaesthetist will only put one in if they think the benefits outweigh the risks.

## **BLOOD TRANSFUSION**

For these types of operations, we aim to have a 'cell saver' machine available which effectively collects and washes your own blood from any bleeding you have during the operation. It can then be given back to you through a cannula. You would usually get this blood before any donated blood products are required.

Donated blood transfusion does comes with its own risks. If you do not wish to have donor blood we can discuss your options.

## PAIN RELIEF

After these operations you can be sore where your wound is but we have many ways of helping with this.

**Oral Medications** - tablets such as paracetamol. Simple but highly effective.

In addition you will be offered some combination of the following options:

**Epidural** – this is often the preferred method of pain relief for open surgery. Although we use this after the operation, it is actually placed before you go off to sleep.

A needle is used to place a small plastic tube in your back near to nerves that allow you to feel your stomach. Drugs (local anaesthetic and painkillers) are given through the plastic tube using a special pump. This means that you feel little or no pain from your wound.

Complications can occur with epidural insertion these include:

- Very Common (1 in 10) low blood pressure, nausea, numbness, inadequate pain relief and itch.
- Common (1 in 100) severe headache
- Uncommon (1 in 1,000) slow breathing, drowsiness, temporary nerve damage (altered sensation or weakness lasting up to a year).
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 Rare or very rare (1 in 10,000 to 100,000) - infections which can cause meningitis, permanent nerve damage including paralysis, fits, severe breathing problems, heart problems and death.

More detailed information is available in an information leaflet which can be downloaded at - https://www.rcoa.ac.uk/ system/ files/05-EpiduralPainReliefweb.pdf

**Nerve Catheters** - are sometimes used as an alternative to the epidural. Using an ultrasound machine, a small plastic tube is placed in between the muscles of your stomach. Drugs (local anaesthetic) are given through the plastic tube; this means that you will feel less pain around your wound.

**PCA (patient controlled analgesia)** - a pump that delivers strong drugs such as morphine into your vein every time you press a button. It means you are in control of getting pain relief when you need it. The pump controls how often you can give yourself painkiller, reducing the risk of overdose. It may cause side effects such as confusion, nausea, constipation and reduce your depth of breathing.

### AFTER: RECOVERY

All patients will go to our Critical Care Ward. Occasionally patients will require additional support such as ventilators (breathing machines) and kidney dialysis. As you recover the amount of monitoring and pain relief needed will reduce. Then you will be discharged to a normal hospital ward. This is a step nearer to you getting back to your own home.

Normal recovery times after the operation are:

- 7-10 days discharge from hospital
- 6-12 weeks able to do most normal daily activities
- 4-6 months completely back to feeling 'normal'.

## CONFIDENTIALITY AND THE USE OF PATIENT INFORMATION

NHS Lanarkshire take care to ensure your personal information is only accessible to authorised people. Our staff have a legal and contractual duty to keep personal health information secure, and confidential. In order to find out more about current data protection legislation and how we process your information, please visit the Data Protection Notice on our website at www.nhslanarkshire.scot.nhs.uk or ask a member of staff for a copy of our Data Protection Notice.

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