Treating your abdominal aortic aneurysm by open repair (surgery)

Introduction
This leaflet tells you about open repair of abdominal aortic aneurysm, it explains what is involved and what are the benefits and possible risks. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such a discussion.

What is an abdominal aortic aneurysm?
The aorta is the largest blood vessel in the body. It carries blood from the heart to the chest and abdomen and then divides to supply the legs. A portion of the aorta can become weakened and form a bulge or aneurysm as it passes through the abdomen. Risk factors for developing an aneurysm include increasing age, family history, smoking and high blood pressure. Aneurysms may stay the same size or increase in size slowly. Small aneurysms can simply be monitored by ultrasound to assess growth. When they reach a certain size they have a sufficiently high risk of rupture that treatment should be considered. Treatment avoids rupture which has a very high risk of death due to internal bleeding.

What is open aortic abdominal repair?
Your aneurysm will be repaired by open surgery. The anaesthetist will ensure you are fully asleep.
A cut is made on your abdomen. The aorta is opened so that an artificial artery or graft can be stitched inside. Sometimes, this graft will attach on to the arteries at the top of each leg. You may then have a cut in each groin. This graft will stay in place forever. Your skin will be joined back together with clips or stitches.

What are the risks of the operation?
An aortic aneurysm repair is a large operation, and there are risks involved. The vascular team will discuss these risks with you. The risks will vary with how good your health is, and will be compared to the risks of not having an operation.
The risk of complications varies with each patient but include
- Post operative chest infections
- Bleeding or infection in the wound
- Heart attack
- Deep vein thrombosis (blood clots in the vein)
AAA open repair

- Kidney problems
- Some men may lose the ability to have an erection.

It is important that you understand that there is a risk of you not surviving the operation, but it will be less than if your aortic aneurysm ruptured.

You will have been helped to make the decision about whether to have surgery, but the final decision will be yours.

What will happen before my operation?
Before you come into hospital, you will be asked to undergo a cardiac test that will involve cycling on a stationary bicycle and being attached to some monitoring equipment to establish your heart and lung function. This will be done at the Royal Berkshire Hospital in Reading. If you are unable to pedal on a bike then we will need to send you for an echocardiogram.

You will also need to attend the pre-operative assessment clinic in the John Radcliffe Hospital in Oxford. You will be seen by a nurse and doctor, so that your medical information can be written down, any tests completed and blood tests taken. Your tablets will be reviewed, and you may be asked to stop some of them before your surgery. We will also take swabs to check for any bugs that could lead to an infection.

You may need to have an appointment with our vascular anaesthetist for tests that will show how fit you are for the surgery, and anaesthetic.

You will be admitted on the day of your operation at 7.30am to the Theatre Direct Admission suite, at the John Radcliffe Hospital. The doctors will discuss your operation and the risks involved and ask you to sign a consent form prior to your operation.

What will happen after the operation?
After your operation you will be taken to Intensive Care Unit, usually overnight, to give you one-to-one care. You will be closely monitored there, with more nurses and equipment than the ward areas. You will have a number of special tubes attached to your body immediately following surgery:

- A drip: this is a bag of special liquid going into your body through your veins. At this time you will not be eating or drinking.
- Naso-gastric tube: this is a plastic tube, which goes through your nose into your stomach. It will drain any gastric contents so that you don’t feel sick. It is removed when your gut is working properly again.
- A urinary catheter which is a tube into your bladder to drain urine.
- Oxygen mask: for a few days you will be given oxygen via a mask.
- Epidural or PCA: an epidural is a fine tube that is placed into your back and is attached to a pump, which gives you drugs to control any pain. A PCA (patient controlled analgesia) is a special drip that goes through a pump to give you pain relief. Either of these two methods will be used to ensure your pain is controlled.
- Your pulse, blood pressure, temperature, breathing rate and heart rhythm will be very closely monitored.
- Your wound will have a dressing on it.

**Your early recovery on the ward**

After 24-48hrs in the intensive care unit (ICU), when your condition is stable you will return to the ward. You may still have oxygen, a drip, a urinary catheter and painkillers.

**Pain**

The incision in your abdomen is likely to be uncomfortable for the first few days. The nurses will monitor your level of pain and initially you will be given painkillers via an epidural or PCA which you control yourself. Once you are eating and drinking, you will be able to take painkilling tablets by mouth. The pain will improve, but you may get twinges and aches for between 3-4 weeks.

**Eating and drinking**

When your gut is working you will be allowed to start drinking and then build up to a light diet, and your drip will be stopped. This can take up to 5 days.

It is normal to lose your appetite after surgery; as a result of this you may lose weight. You may be seen by a dietitian who may recommend that you take supplementary drinks to provide more nutrition to build your strength and aid recovery.

**Your wound**

There will be a dry dressing over your wound. The stitches will usually dissolve over a period of weeks after your operation. Your wound will be checked for any signs of infection, which if they occur, will be treated.

**Moving around**

You will be helped to start moving and walking as soon as possible. Firstly, by sitting in the chair, walking to the bathroom and then around the ward. You will be given a daily injection of heparin to reduce the risk of blood clots, and if suitable, some patients will be given special support stockings to wear. It is a good idea to exercise your legs in bed. The physiotherapist will help you to cough and breathe, and if needed, will give you individual assistance to help you regain your normal mobility. Moving around will not cause any damage to the graft, or to your wound, and will help your recovery.

**Medication**

The doctors will review your tablets. Most people will be sent home on a small dose of aspirin, to ensure the blood is less sticky and a statin to reduce your cholesterol levels. If you are unable to take aspirin, an alternative drug maybe prescribed. Other tablets such as those to control blood pressure will be reviewed.
Preparing for discharge
Preparing for home should start as early as possible. Discharge is usually planned for about five days after your operation. It is a good idea to have someone to help look after you for a while, or some patients choose to live with a member of their family for a short time. Think about the tasks, or activities you do, which may be difficult, especially if you have a caring role for someone else. For example, stocking up on frozen or tinned items means you don't need to go shopping immediately.
If there are complications with your recovery you may need to stay in hospital a little longer.

What happens afterwards?
You will feel tired and weak as you have had a major operation. Recovery times vary, and it can take several weeks to feel 'back to normal'. It also depends on your health and activity before surgery.

Sleeping and feeling tired
It is normal to feel tired for at least 4-6 weeks after your operation. You might need a short sleep in the afternoon for a few weeks, as you gradually increase your level of activity. You may feel low in spirits for a while, so it is good for you and your family to be aware of this.

Diet and appetite
It can take a few weeks for your appetite and diet to return to normal and to regain any weight you may have lost in hospital. Try taking smaller regular meals. You may find your bowel actions take time to become more regular again.

Mobility, hobbies and activity
The muscles underneath your wound may take up to 6-8 weeks to fully heal. During this time, you should not lift heavy objects, or undertake strenuous activities or sports such as golf. Taking regular exercise such as a short walk combined with rest is recommended for the first few weeks which you can gradually increase. Taking on light household chores, and walking around your house is a good starting point.

Working
When to return to work will depend on the type of job that you do. Most people need to wait 4-6 weeks before returning to work, and may work shorter hours for a few weeks, and build back up to their normal hours. Your GP will be able to advise you further.

Sex
You can resume your sex life when you feel comfortable. Sometimes, men have problems sustaining an erection after this operation, as the nerve supply may be disturbed. This affects approximately 10% of men. It is not known what effect, if any, AAA repair has on a woman’s sex life. If you experience problems, your GP or consultant will be able to advise you.

Driving
For safety and insurance reasons patients are unable to drive for 4-6 weeks after their operation. If you are in doubt, you should check with your GP and motor insurance company.

Finally
Centres that provide open aneurysm repairs are required to collect information on a national electronic database or registry to see how safe the procedure is and how well it works. This information will be confidential and will not include your name. The clinical team will also hold a separate electronic database of your repair details to help in your care. This will contain identifiable information just like your hospital notes but will be available only to those involved in your care. A doctor looking after you can fully explain why we do this and what details are recorded.

Some of your questions should have been answered by this leaflet but remember this is only a starting point for discussion about your treatment with the doctors looking after you.

Useful numbers
Royal Berkshire Hospital
Denise Hearfield, Vascular Nurse Specialist 0118 322 8627
Clinical Admin Team (CAT 3) 0118 322 1883
John Radcliffe
Ward 6a 01865 221802
Pre-operative assessment 01865 857635
Theatre direct admissions 01865c 221055
National NHS Stop Smoking quit line on 0800 016 9169

Useful website addresses
www.royalberkshire.nhs.uk
www.vascularsociety.org.uk
www.bhf.org.uk – British Heart Foundation Website

This document can be made available in other languages and formats upon request.

Denise Hearfield, Vascular Surgery
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