

A PATIENT GUIDE AND INFORMATION SHEET ABOUT ABDOMINAL AORTIC ANEURYSMS

WHAT IS AN ABDOMINAL AORTIC ANEURYSM?

An aneurysm is an abnormal swelling of a blood vessel. It can affect any blood vessel but most commonly the abdominal aorta (abdominal aortic aneurysm or AAA).

The aorta is the largest artery in the body. It starts at the heart and runs down towards the legs, just in front of the spine. It gives rise to the major arteries supplying blood to the bowel, kidney's and legs.

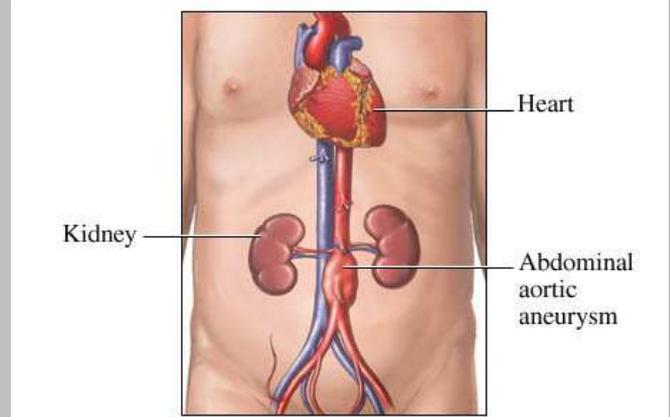
Aneurysms occur because of a weakening in the vessel wall. The weakening is probably due to atherosclerosis, a disease that affects all the arteries of the body including the arteries of the heart, neck, brain and kidneys. As the aneurysm gets bigger, the wall gets weaker and the risk of the blood vessel bursting (rupture) increases. Small aneurysms have a very low risk of rupture. Only when an aneurysm of the aorta gets bigger than 5.5cm do we worry about the risk that the AAA could rupture.

Most abdominal aortic aneurysms cause no problems until they burst (rupture). They are usually picked up on a scan done for other reasons.

WHO GETS AAA AND WHAT IS ATHEROSCLEROSIS?

Atherosclerosis is also known as hardening of the arteries or narrowing of the arteries. It is due to a build-up of fatty deposits or cholesterol in the wall of the arteries. It affects all arteries in the body but most commonly those in the heart, neck, brain, kidneys, abdomen and legs. It can restrict the blood flow in the affected area but might also cause weakening of some blood vessels.

Atherosclerosis and aneurysms are much more common in elderly men, those who smoke, those who have high cholesterol or high blood pressure, in diabetic patients, those who are obese and those who do not do enough exercise or physical activity. Aneurysms often run in the family.



HOW IS ATHEROSCLEROSIS TREATED?

1. Stop smoking
2. Regular exercise
3. Make sure your blood pressure is well treated
4. Make sure your diabetes is well controlled
5. Take aspirin daily
6. Take a statin daily (even if your cholesterol level is normal)
7. Take an ACE inhibitor daily (even if your blood pressure is normal)
8. Diet – follow a low fat diet and maintain a healthy weight

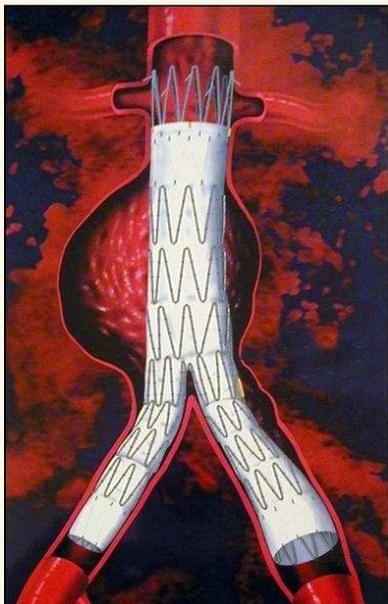
These measures have also been shown to reduce the growth rate of AAA and reduce the risk of rupture.

WHAT TESTS ARE NEEDED FOR ABDOMINAL AORTIC ANEURYSMS?

If you think you might have an abdominal aortic aneurysm you should ask your general practitioner for an ultrasound scan. If an abdominal aortic aneurysm is detected, ask your general practitioner or specialist for a referral to see Mr. Stuart Walker.

Mr. Stuart Walker will ensure that the following are performed:

1. A thorough medical history will be obtained.
2. A thorough physical examination will be performed.
3. Blood tests – including a check of your cholesterol level.
4. If your AAA is big enough that there is a risk of rupture, a CT scan will be requested. This is a painless test.



HOW ARE ABDOMINAL AORTIC ANEURYSMS TREATED?

Make sure your atherosclerosis is well treated.

Stop smoking – not only will this prevent further damage to your arteries, it will slow the growth rate of your AAA and reduce the risk of rupture.

Regular exercise – this will improve your overall fitness. Any type of exercise is good but walking is best.

Statins – although usually used for patients with high cholesterol levels, statins reduce the growth rate of AAA and reduce the risk of rupture.

If your AAA is greater than 5.5cm in diameter, a procedure to treat the AAA may be recommended:

Open repair – through an incision on the abdomen a plastic tube is used to repair the AAA. This is a big operation from which many complications can occur, including death.

Endovascular repair – this is where a stent graft is used to reline the artery through small incisions in the groin (picture to left). Not every patient is suitable for this type of treatment. This is decided on the basis of the CT scan. It also has some risks, including death, but these risks are lower than with an open repair. Despite this, you will need to be monitored for the rest of your life to detect any late complications.