

Abdominal Aortic Aneurysm

The aorta is one of the main blood vessels in the body that distributes blood to all our organs. A weakness in the wall of the abdominal aorta may cause it to expand or bulge, it is then called an abdominal aortic aneurysm (AAA). The pressure from blood continuously flowing through the abdominal aorta may cause this weakened part of the aorta to bulge further, and the aortic aneurysm size to increase, but at some point the strength of the aortic wall will be insufficient to contain the pressure of the blood flowing through it, when it gets too large the aorta can burst, with potential catastrophic consequences including death.

Symptoms and Signs

Most AAA's grow very gradually and do not cause symptoms.

These may be discovered incidentally during routine examination or testing for another unrelated condition. Occasionally patients may feel abdominal or back pain may be present in some patients. In some cases, these symptoms can be a sign to seek urgent treatment to avoid aneurysm rupture. If you have an AAA and experience symptoms abdominal, back or side pain, you should contact a vascular surgeon immediately.

If your aneurysm bursts, you may suddenly feel intense pain, with associated weakness, dizziness or loss of consciousness. This is a life-threatening situation.

Risk Factors for developing Aneurysms

Aneurysms are more common in men.

And the risk of developing AAA increases with age. Some countries have screening programmes to target aortic aneurysms especially in men in the sixth decade of life.

- Hypertension.
- Smoking
- Having an immediate first-degree relative who has had AAA.
- Certain connective tissue disorders

Diagnostic Testing

An AAA may be identified by your doctor or vascular surgeon on a routine examination. If this life threatening condition it is suspected your doctor will order diagnostic tests, and screen for other vascular problems, including aneurysms and arterial blockages:

- Abdominal ultrasound, a quick, painless and non-invasive test, performed in our vascular laboratory.
- Computed Tomography (CT) scan, can further identify any vascular or other pathology in the chest or abdomen, and can be used to plan further treatment.
- Angiography, when dye is injected into the blood vessels for further information or to plan treatment.

Treatment

Depending on the size of your aneurysm, your vascular surgeon may choose a wait and see approach, with regular checkups to monitor the growth and behaviour of the aneurysm. Any procedure to fix your aneurysm includes some risks including death. The judgement to repair an aneurysm is based on a balance of the risks and benefits of surgery, and including the size of the aneurysm.

Once an aneurysm reaches a certain size or if symptoms develop, your vascular surgeon may recommend that your aneurysm is repaired.

All treatment involves replacing the aneurysm with a synthetic graft. This can be done either by the classical open technique or endovascular (key hole) technique

Open Technique. The aortic graft is sewn in after proximal and distal clamps control the blood flow.

Endovascular Technique.

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