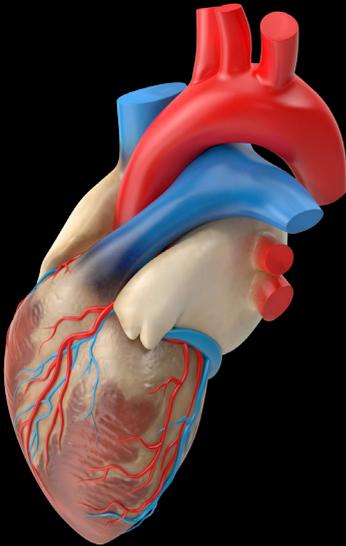


THINK AORTA

Caring for your Aorta



Know your

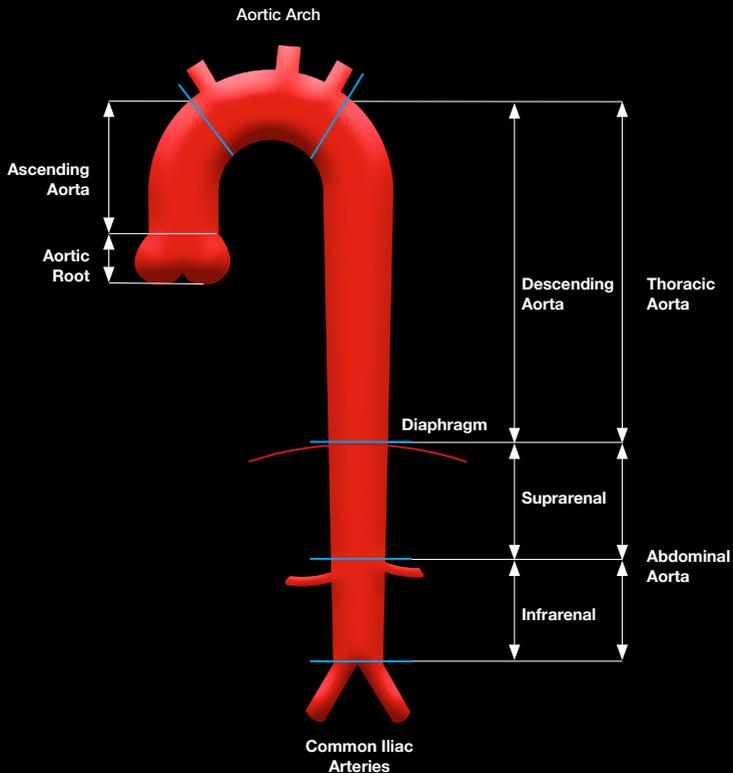
- **Diagnosis**
- **Numbers**
- **Choices**
- **Treatment**

Aortic Dissection Awareness UK & Ireland in collaboration with:

Heart Research UK
Society for Cardiothoracic Surgery in Great Britain and Ireland
The Royal College of Emergency Medicine
Liverpool Heart & Chest Hospital
British Cardiovascular Society



The Aorta



The aorta is the main blood vessel from the heart, which takes blood to all the organs of the body. It has 5 segments which, working from the heart to the tummy are: a) the aortic root, b) the ascending aorta, c) the aortic arch, d) the descending thoracic aorta and e) the abdominal aorta. Blood is pumped at about 5 litres/min through this system when at rest, increasing up to about 25 litres/min when exercising.

Systolic blood pressure (this is the amount of pressure in your arteries during the contraction of your heart muscle, this is the peak blood pressure when the heart pumps) may double during exercise and exceed 300mmHg. The aorta is exposed to the extremes of high blood flow, high blood pressure and fluctuations in blood borne metabolites, toxins and infections. The aorta is therefore vulnerable to life threatening disease. It is important to know about your aorta and to look after your aorta.

Know Your Diagnosis

Diseases of the aorta often result in an aneurysm, which is a swelling of the aorta. Aneurysms increase the risk of a tear, dissection or rupture of the aorta, a risk which increases as the size of the aneurysm increases. If this happens, patients may need emergency surgery. Alternatively, planned surgery may be required in order to prevent such a life-threatening emergency.

The commonest diseases underlying aneurysms include: familial predisposition – which means that other family members may be affected, connective tissue disorders (Marfan Syndrome, Vascular Ehlers Danlos Syndrome, Loeys-Dietz Syndrome and Turners Syndrome) and Bicuspid Aortic Valve Syndrome, as well as infection, inflammation and trauma.

Aneurysms may also follow an acute aortic dissection, as the disease matures into a chronic aortic dissection. Other risk factors such as diabetes, high cholesterol and high blood pressure are also important.

Know Your Numbers

During your follow-up appointments and scans, there will be a range of numbers which will become important to you and which will indicate when you might need surgery for an ascending aortic aneurysm. The commonest trigger for surgery on an aortic aneurysm is a diameter of 5.5cm.

Factors that may reduce this threshold to 5.0cm include a bicuspid aortic valve, a genetic predisposition or a connective tissue disorder. The threshold may be lowered to 4.0cm if you also need heart surgery for other diseases, such as heart valves or coronary arteries.

Your symptoms - how the aneurysm is actually affecting you – may also mean that the threshold for surgery is lowered. It is reasonable for your medical team to give you an idea of what size of aorta would lead to an indication for aortic surgery.

Know Your Choices

Make the correct choices to help keep your aorta healthy. You need to actively manage your blood pressure and visit your GP regularly. Stop smoking and make healthy dietary choices. Check your cholesterol level and get treatment if it is high. If you have diabetes, make sure that your glucose levels are controlled.

While you need to stay active, if you have a diagnosis of aortic disease you should avoid doing things that raise your blood pressure such as weight-lifting, moving heavy objects where straining may occur or pushing yourself to exhaustion. Ordinary day-to-day activities should not pose a risk to you. Exercise is important.

Know Your Treatment

Medicines are very important and effective in protecting your aorta. Your doctor may prescribe beta blockers or other blood pressure lowering medication and it is important that these are taken as prescribed. Other medicines may also be needed to control your blood pressure.

In the event of your aneurysm needing to be repaired, this will involve either a surgical repair; the placing of a 'stent' within the aorta; or a combination of both. These major operations often take many hours with in-hospital recovery over weeks, so they are not undertaken lightly. Recovery at home may take months.

Your surgeons will discuss the risks and benefits of different treatments with you when you see them in clinic. This complex, highly specialised surgery may require you to be referred to a specialist centre.

The national patient association Aortic Dissection Awareness UK & Ireland has a patient support network which you can access here:

www.aorticdissectionawareness.org



Aortic Dissection Awareness UK



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