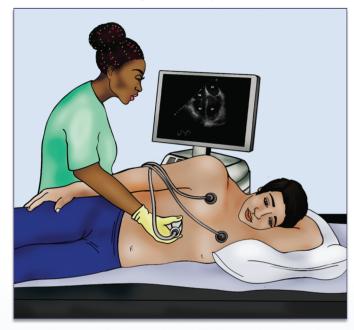
What tests will I need?

Most people with aortic regurgitation will have an echocardiogram and ECG. Other tests outlined below may also be performed.



• Electrocardiogram (ECG)

Stickers are placed on the chest and the electrical activity of the heart is recorded.

• Echocardiogram (Echo or cardiac ultrasound)

During the test an ultrasound probe is placed on the chest and moving pictures of the heart are produced. The test takes around 30 minutes.

Cardiac MRI scan

This is a scan of the heart using a magnet to generate moving video images of the heart. A needle will be inserted into your vein in the arm prior to the test. You lie down in a tunnel for the scan which will take around 30-40 minutes. The scanner is noisy so you will wear ear muffs to protect your ears. The scan may not be suitable for those who are claustrophobic and if this is the case we can arrange other tests instead.

Lifestyle

As with any type of heart disease, it is important that you follow a healthy diet and keep your weight within a normal range. If you smoke it is advisable that you stop. Your GP can guide you to support available to help you stop smoking. Most patients with aortic regurgitation will be encouraged to take regular gentle exercise but you should check this with your healthcare professional. If you have a stretch of the aorta (the main blood vessel exiting the heart) you are advised to avoid heavy lifting. If you are planning to get pregnant, you should discuss this with your healthcare professional first and let them know immediately if you become pregnant.

All patients with heart valve disease should visit their dentist on a regular basis to ensure good dental hygiene to reduce their risk of Endocarditis (heart valve infection).

Symptoms

If you experience any new symptoms in between clinic appointments then it is important that you let your healthcare professional know.

Important symptoms to be aware of:

- Increasing shortness of breath (especially on exertion or when lying flat in bed)
- · Severe or increasing ankle swelling
- Chest pain or tightness
- Palpitations (rapid or irregular heartbeat)
- Difficulty exercising (not being able to do as much for as long)
- Blackouts

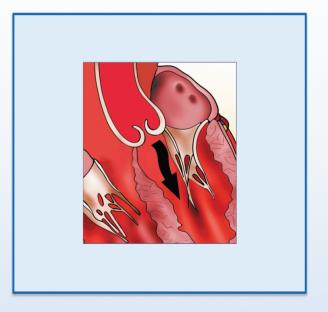
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PATIENT INFORMATION LEAFLET

Aortic Regurgitation



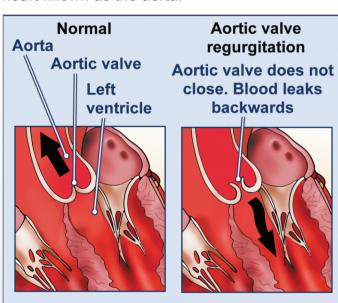
www.bhvs.org.uk

What are Heart Valves?

There are four valves in the heart. They allow blood to be directed around the heart and when working normally ensure the blood flows in one direction. They open and close with every heartbeat - that's 100,000 times a day!

What is the aortic valve?

The aortic valve is the main outlet valve of the heart which allows blood to exit the heart with every heartbeat. It is a one way valve that closes after the blood has left the heart. It is attached to the main blood vessel exiting the heart known as the aorta.



When the heart pumps, blood exits the heart into the aorta. When the heart relaxes, the aortic valve shuts and stops blood re-entering heart. When the heart pumps, blood exits the heart into the aorta. When the heart relaxes, the aortic valve does not close tightly and blood leaks backwards into the heart.

What is aortic regurgitation?

Aortic regurgitation is a condition where the one-way aortic valve doesn't close tightly and therefore becomes leaky. Blood exits the heart when the left ventricle (heart muscle) pumps. As the valve is leaky, when the heart relaxes blood is able to fall back into the heart.

When the heart is listened to with a stethoscope, the abnormal blood flow results in an abnormal sound known as a heart murmur. Aortic regurgitation is usually diagnosed following an echocardiogram (echo or cardiac ultrasound).

What causes aortic regurgitation?

There are many reasons the aortic valve can be leaky. It can be due to a problem with the valve (valve-related causes). It can also be due to a problem with the aorta (main blood vessel). If the aorta is stretched then the valve is unable to close properly resulting in a valve leak (aorta-related causes). Some causes are listed below:

Valve-related causes

Bicuspid aortic valve (people born with two valve leaflets instead of three)

Previous endocarditis (valve infection)

Valve degeneration (wear and tear)

Rheumatic fever

Aorta-related causes

Longstanding high blood pressure

Diseases affecting elastic tissues of the arteries (e.g., Marfans, Ehlers Danlos)

Idiopathic aortic dilation, which is an unexplained stretch of the aorta.

What are my treatment options?

Aortic regurgitation is a chronic (long term) condition. It can be graded into three categories; mild, moderate and severe.

Regardless of the severity of aortic regurgitation, if you have no symptoms then it is likely that the Heart Valve Team will keep you under review with a clinic visit and echocardiogram (echo or cardiac ultrasound) on a regular basis. Patients with aortic regurgitation are often followed up for many years without symptoms (see end of leaflet). Most patients with mild aortic regurgitation will not need follow up.

If the valve has severe aortic regurgitation (is severely leaky) and you have symptoms then you may be referred for aortic valve replacement.

Due to the importance of symptoms in patients with aortic regurgitation, you must let your Healthcare Professional know if you develop symptoms in between clinic appointments.

Is a ortic regurgitation associated with any other conditions?

Some patients with aortic regurgitation also have abnormalities of the aorta (the main blood vessel leaving the heart). If this is the case, your doctor may advise medication to keep your blood pressure controlled.