



Oxford University Hospitals
NHS Foundation Trust

Ajmaline challenge for Brugada Syndrome

Information for patients



Your doctor has recommended that you have an ajmaline challenge. The purpose of this test is to see if you are likely to have Brugada syndrome, which is a disorder that affects the cells of the heart, causing it to have an altered rhythm.

Ajmaline is a drug which will show up ECG changes if you have Brugada syndrome. If you have normal cardiac cells, ajmaline will have little or no effect on the ECG results.

If you have Brugada syndrome, you may be at risk of developing fast heart rhythms (arrhythmia). If your heart starts beating at an abnormally fast rate then it does not work as efficiently. This can cause symptoms such as weakness, dizziness, chest pain, shortness of breath, collapse, or even death in very rare cases.

If you have a close family member who has either been diagnosed with Brugada syndrome, or who has died at a young age from a suspected heart condition, it is very important that you and your relatives are screened for Brugada syndrome.

It is important to remember that the majority of people who have the appearance of Brugada syndrome on an electrocardiogram (ECG) do not experience arrhythmia and feel perfectly well. If your doctor suspects you may have Brugada syndrome they will have advised you to have this well-established, straightforward clinical test to confirm the diagnosis.

What happens during the ajmaline challenge?

When you arrive on the Cardiac Day Case Unit you will be introduced to your nurse. They will explain what will happen and answer any questions you may have. Before the challenge starts, it is important to tell your nurse or doctor if you have any allergies or have had a previous reaction to any drugs, including over the counter or herbal remedies.

Before the procedure you will have an ECG and your weight will be recorded, so that we can calculate the correct dose of ajmaline. A doctor will also see you to discuss the procedure with you, and then ask you to sign a consent form. This is to confirm you understand the procedure and risks and are happy to go ahead. If you have any concerns or questions, please ask before signing the consent form.

Before the procedure starts, you will be given a hospital gown to wear and the doctor or nurse will insert a small needle (cannula) into a vein in your hand or arm, through which you will be given the ajmaline during the challenge.

The ajmaline will be injected as a liquid, called an 'infusion', through the cannula by a special pump. This makes sure it is given at the correct speed. During the infusion an ECG measurement will be recorded at 1 minute intervals and for up to 30 minutes after the ajmaline infusion has finished, or until any ECG changes have returned to normal. After this time the ajmaline should have worn off.

You will then be given a drink and something to eat and the cannula will be removed.

Do I need to fast (not eat or drink) before this test?

No, you can continue to eat and drink as you would usually.

Benefits

Checking for a diagnosis of Brugada syndrome is important, as it may mean you need other tests and treatment to prevent the problems associated with the syndrome. Also, because the syndrome is hereditary (passed on from parents to children), other members of your family may need to be tested. However, if the test is negative, this will provide re-assurance that it is unlikely you have Brugada syndrome.

Side effects and risks

The ajmaline challenge is safe. However, as with any procedure, there are potential risks that may occur either during or after the challenge. Complications associated with this procedure are very rare, can be treated, and are rarely life threatening.

It is common to experience a metallic taste in your mouth while you are being given the ajmaline. You may also experience visual disturbance, such as double vision. These are both harmless and usually get better quickly once the infusion is completed.

Very rarely, the ajmaline may cause your heart to go into a very fast heart rhythm. If this happens it often needs no treatment other than monitoring you while the ajmaline wears off. Rarely this heart rhythm can require urgent treatment with cardioversion (a controlled electrical shock to restore normal heart rhythm).

Worldwide, no cases of death have ever been reported as a result of an ajmaline challenge.

Your doctor will only recommend that you have an ajmaline challenge if they feel the benefits clearly outweigh the risks.

Alternatives

Other medicines can be used to test for Brugada syndrome, but ajmaline is the most effective and takes less time to wear off, has fewer side effects and requires less monitoring. For these reasons, many hospitals worldwide use ajmaline for this test.

After the ajmaline challenge

You should be able to go home later the same day, or when your ECG reading returns to normal. You are allowed to drive yourself to and from the hospital.

In the rare event that you have to have cardioversion, you will need to be monitored for a longer period of time. If your heart rate remains stable you should be able to go home later that day. However, you will not be able to drive yourself home.

The ECG results will often need to be reviewed after the test by a specialist doctor known as an Electrophysiologist. The doctor giving you the ajmaline may not be able to tell you the result of the test immediately. However, you will normally be told the result of the test the same day, before you leave the hospital. An electronic letter with the results of the challenge will also be sent to your GP.

How to contact us

If you have any other questions or need any further information, please contact us.

Cardiac Angiography Suite

Tel: **01865 572 616**

(Monday to Friday, 7.30am to 9.00pm)

Arrhythmia Nurses

Tel: **01865 228 994**

(Monday to Friday, 8.00am to 5.00pm)

You can also contact the secretary for the Consultant that referred you for the test (please see your appointment letters for contact details).

Further information

More information about Brugada can be found on the following websites:

SADS UK

Website: www.sadsuk.org

Cardiac Risk in the Young (CRY)

Website: www.c-r-y.org.uk

Arrhythmia Alliance

Website: www.heartrhythmcharity.org.uk

Please note:

The department where your procedure will take place regularly has professional observers. The majority of these observers are healthcare professionals, qualified or in training, and occasionally specialist company representatives. If you do not wish observers to be present during your test, please tell a doctor or nurse.

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALS@ouh.nhs.uk**

Written by Arrhythmia Nurse Specialist and Practice Development Nurse
Cardiac Directorate
January 2018
Review: January 2021
Oxford University Hospitals NHS Foundation Trust
Oxford OX3 9DU
www.ouh.nhs.uk/information

