

# DOBUTAMINE STRESS ECHOCARDIOGRAM



**Your cardiologist has requested a Dobutamine Stress Echocardiogram (DSE). This leaflet explains what the test involves.**

## **WHAT IS A DSE?**

During a Dobutamine Stress Echocardiogram (DSE), your heart rate is increased by administering the medication dobutamine. This medication is administered through an IV and causes your heart to beat faster and more forcefully while you lie comfortably on the test table.

It is a painless test that assesses the heart for oxygen deficiency (ischaemia) using echocardiography. The assessment also takes into account the ECG findings and any (recognisable) symptoms that may occur. Sometimes a dose of contrast is used for this purpose.

## **PREPARATION**

It is best to undergo the test on a not-too-full stomach. Have a light meal no later than two hours before the test. It is important that you do eat, as not eating may intensify any potential side effects. On the day of the test, make sure to drink plenty of fluids, but avoid caffeinated beverages; do not eat chocolate or smoke. These contain substances that can interfere with the test and may intensify any side effects. You will also need to stop taking certain medications temporarily. Your cardiologist will advise you on this.

## **MEDICATIONS**

Some medications can affect the accuracy of the test. For this reason, you may need to stop taking some of your medications one to two days before the test. Which medications you need to stop taking and when will be discussed with you during your appointment. This information will also be provided in your appointment confirmation. After the test, you should resume taking them immediately. Your cardiologist will decide with you how to gradually reduce your medications and will inform you about this.

## **DURING THE TEST**

The doctor's assistant or cardiologist will insert an IV into a vein in your arm. You will lie on your left side on the test table with your upper body uncovered. While dobutamine is given through the IV, ultrasound images of your heart will be taken. The medication dose is increased every three minutes until the target heart rate is achieved. During this time, your blood pressure will be monitored, and you will be asked whether you are experiencing any symptoms. We will also take additional ECG recordings to monitor your heart. At the end of the test, and only if there are no medical reasons not to, you may be given a beta-blocker to help your heart rate return to normal more quickly. In total, the test, including the preparations, takes approximately one hour.

### POSSIBLE RISKS

- Ultrasound imaging does not involve the use of radiation or X-rays. There are no risks associated with an ultrasound.
- Inserting the IV (a soft plastic tube) into your arm may briefly cause a sharp, scratch-like sensation. Once the IV is in place, it is usually well tolerated, and the rest of the test is not painful.
- The medication dobutamine can very occasionally cause heart rhythm disturbances or chest pain (<1 in 100). This is usually harmless and often only temporary.
- As a result of the dobutamine, symptoms such as shortness of breath, some heart palpitations, headache, and, in some cases, a feeling of anxiety may occur. About five minutes after the medication is stopped, these feelings usually start to fade, and you will generally feel completely back to normal after ten minutes.
- There is an extremely small risk (<1 in 2,000) that the test may cause minor damage to your heart. This is usually the result of pre-existing narrowing of the coronary arteries, which becomes apparent during the test.
- Another extremely small risk (<1 in 10,000) is the possibility of an allergic reaction, in which case you will be treated immediately.
- In around 1 out of 100 patients, dobutamine can cause a drop in blood pressure, but this usually improves quickly once the medication is stopped.
- Finally, there is a small risk of bruising around the spot where the IV was inserted, which usually disappears within two weeks.

All staff members are trained to deal with these issues.

### DURATION OF THE TEST

It may take up to 45 minutes to complete the DFE scan, after which you will remain under telemetry monitoring in the day treatment room for up to two hours. You will stay in a room with other patients, where your heart rhythm is continuously monitored. This observation period is necessary to allow your heart to fully settle again. Only after

this will the IV needle be removed, and you can go home. Please keep in mind that you will be with us for approximately two hours in total.

### GOING HOME

It is recommended that you take things slowly during the first few hours after the procedure. The doctor's assistant will provide you with the information relevant to your situation. You are allowed to drive yourself home.

### THE RESULT

The cardiologist performing the ultrasound may not be your usual cardiologist. The cardiologist who performed the test will give you a preliminary result. Your usual cardiologist will give you the final results. You may receive this by email, by phone, through the Wellbee patient portal, or during a follow-up appointment at the clinic, depending on what you and your cardiologist have agreed.

### DO YOU HAVE ANY FURTHER QUESTIONS WHEN YOU ARE BACK HOME?

For any questions or physical complaints following your day visit, you can contact HartKliniek on weekdays between 8:30 am and 5 pm at 088 – 500 2000.

For urgent medical questions in the evening, at night, or during the weekend that cannot wait, you can call the on-call cardiologist directly at 088 – 500 2000 (choose option 9).

In the event of a medical emergency, always call 112 immediately.

### FINALLY

If you are unable to attend, please call HartKliniek at least 24 hours in advance. You will then be able to schedule a new appointment right away.

If you have any questions, you can call HartKliniek at 088 – 500 2000 (available between 8:30 am and 5 pm).