

Clinic / Doctor:



Patient data:

englisch

Examination scheduled to take place on (date):

Dear patient,

an ultrasound examination of your heart under physical exertion (stress echocardiography) will measure the pumping activity of your heart. This method is used to assess the perfusion of your heart muscle as well as to detect any impairment or heart valve disease. The following text is intended to inform you about the course of treatment, related risks and any measures you need to take before and after the procedure as well as to prepare you for your pre-procedure interview with the doctor. During the interview, the doctor will explain to you the advantages and disadvantages of the scheduled procedure compared with alternative methods available, and inform you of any risks specific to your case and of any potential complications which could result from them. The doctor will answer all of your questions in order to reduce any fears or concerns you may have. You may then consent to the suggested examination or reject it.

Please read the following information and complete the form carefully. It is understood that your data will be treated as confidential. Your doctor will provide you with a copy of the completed and signed form after the interview.

HOW STRESS ECHOCARDIOGRAPHY WORKS

During an echocardiogram, an ultrasound transmitter and receiver, a so-called transducer, generates sectional images of the heart and make them visible on a monitor. A heart muscle well-supplied with blood moves strongly in the ultrasound image, whereas a heart muscle lacking perfusion moves weakly. If the ultrasound image shows normal movement of the heart muscle in a state of rest, and if physical exertion then shows a weakening of individual areas of the heart, it points to the coronary vessel supplying the respective area being constricted. This leads to a lack of blood supply under exertion. Stress echocardiography can thus make any lack of perfusion of the heart muscle visible.

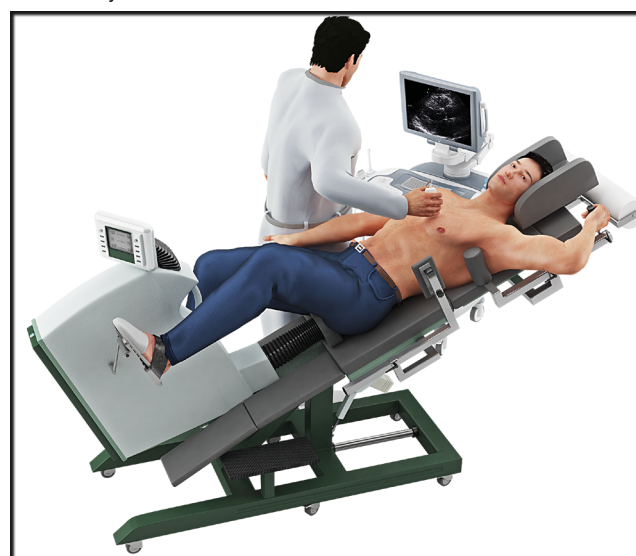
Stress echocardiography also shows if scarring of any area of the heart muscle has occurred as a result of a heart attack or if the heart muscle is still active under exertion. This allows for the doctor to recognise any permanent loss of function of the heart muscle resulting from impaired circulation or a heart attack. This is important if a constricted or blocked coronary vessel could be re-opened through cardiac catheterisation or bridged through bypass surgery.

Blood flow inside the heart and heart valve function can also be assessed using stress echocardiography.

COURSE OF STRESS ECHOCARDIOGRAPHY

First of all, the doctor will generate an image of the heart's movement in a state of rest using the ultrasound equipment. After that, he/she will create an exertion situation, for instance by having the patient exercise on a bicycle ergometer. Alternatively, certain medication simulating a state of physical exertion, for example by increasing the heart rate, can be administered via a peripheral venous cannula. The doctor will then monitor whether this exer-

tion has any effect on the pumping movements of the walls of the heart. By saving the ultrasound sequences, the doctor can compare the different images generated at various exertion levels directly and also measure any changes. For particular types of examinations, contrast media will be applied in addition via a vein. During the exertion phase triggered by the medication, you will notice that your heart is beating faster. This can sometimes be uncomfortable, since you will feel as though you are under great physical strain even though you are lying on an examination bed. The increased heart rate can also lead to higher blood pressure and result in an irregular heart rate, nausea, shortness of breath, headache or chest pains. However, these symptoms are usually harmless.



ALTERNATIVE METHODS

In some cases, alternative examination methods could be used, such as computer tomography (cardiac CT scan), magnetic resonance imaging (MRI), a heart catheter examination or scintigraphy. These procedures, however, are also accompanied by risks and have advantages and disadvantages of their own. Your doctor will explain to you why he would recommend stress echocardiography in your particular case.

PROSPECTS OF SUCCESS

Stress echocardiography allows for the movement of your heart under exertion and thus for an immediate assessment of the perfusion of your heart muscle. Stress echocardiography is therefore considered an important and highly reliable diagnostic tool to detect impaired circulation, which is present in patients with coronary heart disease for example. Other types of examination, such as a heart catheterisation, may then become necessary.

DIRECTIONS FOR PREPARATION AND AFTERCARE

Please follow the instructions of the doctor and assistance personnel closely. Unless specifically instructed otherwise, please adhere to the following guidelines:

Medication: It is important for you to inform your doctor of any medication you take on a regular basis (in particular any medication to treat high blood pressure or cardiac arrhythmia). This includes any over-the-counter medication and herbal remedies. Your doctor will let you know if and for how long you need to stop taking your medication.

Food and drink: Please ask your doctor whether the examination requires pre-procedure fasting or whether you need to refrain from caffeinated beverages and foods such as coffee, tea, coke or chocolate.

Should you experience symptoms such as dizziness, shortness of breath or chest pains during the exertion phase, please tell your doctor immediately.

Your ability to drive may be impaired after certain types of medication have been administered. Therefore you must not actively participate in road traffic for a period of 12 hours after the examination (not even as a pedestrian) nor participate in any risky activities.

RISKS, POSSIBLE COMPLICATIONS AND SIDE EFFECTS

Most of the complications which may arise during the examination can also arise at any time in everyday life during comparable exertion. However, in the examination situation, the doctor is constantly monitoring your blood pressure and pulse and can thus detect problems early on, and also has the necessary equipment available to him/her in order to be able to respond immediately to any complications. For this reason, life-threatening complications are very rare and are only to be expected in patients with severe pre-existing conditions.

Please understand that, for legal reasons, any possible risks associated with this procedure must be listed, even if some of these only occur in exceptional cases. During the interview, your doctor will inform you of any risks specific to your case. You may also choose to waive a detailed explanation. In that event, please pass over this section on risks and confirm your waiver with your signature in the final section of this form.

Allergic reactions (intolerance symptoms), e.g. to medication or ultrasound contrast media involving skin rash, itching, swelling or nausea and coughing may occur. Severe reactions such as shortness of breath, spasms, tachycardia or circulatory shock are rare. Due to insufficient perfusion, temporary or permanent

organ damage, e. g. brain damage, paralysis or kidney failure may occur even despite adequate intensive care.

Damage to the skin, soft tissue or nerves, - for instance through the insertion of a peripheral venous cannula, leading to bruising or syringe abscess - rarely occur. Temporary or, in rare cases, permanent sensory disturbance, paralyses, pain and numbness may then result, or scars may remain.

During or shortly after the examination, **cardiac arrhythmia** may occur. It usually disappears without treatment or can be treated successfully with medication. In extreme cases, it may have to be stopped with a power surge.

The exertion may lead to **chest pain** (angina pectoris) or to **shortness of breath**. Administering medication will usually alleviate those symptoms. In extreme cases, however, a **heart attack** may occur, which may then require immediate treatment via catheterisation. In some cases, bypass surgery may become necessary.

The occurrence of **cardiac arrest** requiring resuscitation and sometimes leading to temporary or permanent organ damage e. g. brain damage, paralyses or kidney failure, is extremely rare.

If Atropine is administered, it may lead to **dryness of mouth, urinary emptying disorder** and temporary **vision disorders**.

The medication administered can lead to a constriction of the airways or to an **asthma attack**, both of which can be easily treated with medication.

Especially in patients with severe heart disease, **pulmonary vascular congestion** leading to shortness of breath and requiring further treatment may result.



Questions about Your Medical History

Please fill in the following questionnaire carefully before your information talk. **Please tick the applicable box!** It goes without saying that your information will be treated confidentially. The information you provide will help the physician to better assess the risks in your particular case, to advise you on the complications that could occur, and to take any steps needed to prevent complications and side effects.

Do you need regularly medications for high blood pressure or heart rhythm problems?

 yes no

Benötigen Sie regelmäßig Medikamente gegen hohen Blutdruck oder Herzrhythmusstörungen?

Digitalis, Verapamil, Betablocker.
 Digitalis, Verapamil, Betablocker.

Any other: _____
 Sonstiges:

When did you take the last dose? _____
 Wann war die letzte Einnahme?

Do you take any other medications?

 yes no

Werden andere Medikamente eingenommen?

If so, which ones: _____
 Wenn ja, bitte auflisten:

(Please include non-prescription medications, herbal and other natural remedies, vitamins, etc.) (Auch rezeptfreie Medikamente, natürliche oder pflanzliche Heilmittel, Vitamine, etc.)

Are you pregnant?

Sind Sie schwanger?

 not certain yes no
 nicht sicher

Do you smoke?

 yes no

If so, what and how much daily: _____
 Rauchen Sie? Wenn ja, was und wie viel täglich:

Do you drink alcohol regularly?

 yes no

Trinken Sie regelmäßig Alkohol?

- 1-2 times a week 1 - 2 mal, 3-5 times a week 3 - 5 mal,
 6-7 times a week 6 - 7 mal pro Woche
 1/2 litre beer or 1/4 litre wine or 1 shot of spirits
 1/2 ltr. Bier oder 1/4 ltr. Wein oder 1 Schnaps,
 1 ltr. Bier oder 1/2 ltr. Wein oder 2 Schnäpse,
 1 litre beer or 1/2 litre wine or 2 shots of spirits
 more mehr

Do you have a pacemaker or a defibrillator?

 yes no

Haben Sie einen **Herzschrittmacher** oder **Defibrillator**?

If yes, please bring your pacemaker ID card.
 Wenn ja, bitte Herzschrittmacherausweis mitbringen.

Do you have or have you ever had any of the following diseases: Liegen oder lagen nachstehende Erkrankungen vor:

Allergies / Oversensitivity?

 yes no

Medications, foods, contrast media, iodine, sticking plaster, latex (e.g. rubber gloves, balloons), pollen (grass, trees), anaesthetics, metals (itching caused by metal spectacles frames, jewellery, jeans buttons).

Allergie/Überempfindlichkeit? Medikamente, Lebensmittel, Kontrastmittel, Jod, Pflaster, Latex (z.B. Gummihandschuhe, Luftballon), Pollen (Gräser, Bäume), Betäubungsmittel, Metalle (z. B. Juckreiz durch Metallbrillengestell, Modeschmuck oder Hosennieten).

Any other: _____
 Sonstiges:

Heart, circulatory or blood vessel diseases?

 yes no

Heart attack, chest pain and/or tightness (angina pectoris), heart defect, irregular heart rhythm, inflammation of heart muscle, heart valve disease, shortness of breath while climbing stairs, heart surgery (possibly with insertion of an artificial heart valve, pacemaker, defibrillator), high blood pressure, low blood pressure, stroke, varicose veins, inflammation of a vein, thrombosis, embolism.

Herz-/Kreislauf-/Gefäß-Erkrankungen? Herzinfarkt, Angina pectoris (Schmerzen im Brustkorb, Brustenge), Herzfehler, Herzrhythmusstörungen, Herzmuskulenzündung, Herzklappenerkrankung, Luftnot beim Treppensteigen, Herzoperation (ggf. mit Einsatz einer künstlichen Herzklappe, Herzschrittmacher, Defibrillator), hoher Blutdruck, niedriger Blutdruck, Schlaganfall, Krampfadern, Venenentzündung, Thrombose, Embolie.

Any other: _____
 Sonstiges:

Diseases of the respiratory tract (breathing passages) or lungs?

 yes no

Asthma, chronic bronchitis, inflammation of the lungs, emphysema.

Erkrankung der Atemwege/Lungen? Asthma, chronische Bronchitis, Lungenentzündung, Lungenemphysem.

Any other: _____
 Sonstiges:

Benign prostate enlargement ?

 yes no

Gutartige Prostatavergrößerung?

Elevated Interior eye pressure (intraocular pressure), glaucoma?

 yes no

Erhöhter Augeninnendruck, Glaukom (grüner Star)?

If certain answers are preselected, please correct them if anything has changed.)

