

External cardioversion

Cardioversion is a procedure that is used to convert an irregular or very fast heart rhythm into a normal heart rhythm. It is performed by applying an electric discharge to the heart, which causes the heart's electric system to restart and the pacemaker's normal function to operate again. Common rhythms that require cardioversion include atrial fibrillation and atrial palpitation.

On some people a moderately invasive procedure is performed called transesophageal echocardiography (TEE, from its acronym in English) before the cardioversion to confirm that there are no blood clots in the heart. For the TEE, the patient must swallow a thin tube with an echography probe at the end, which can be placed against the posterior wall of the heart.

Preparation:

- Before the cardioversion, you must not eat or drink anything after midnight on the night before the test.
- Check with the doctor on whether you should take medications as usual. If you are diabetic, ask the doctor how to adjust your diabetes medications. If you take medications on the day of the test, take them with small sips of water.
- Wear comfortable clothes. You will have to change and put on a hospital gown for the procedure. Do not wear jewelry or valuables.
- Most patients are able to return home after the procedure. A friend or family member must drive you home after the procedure.

What to expect:

- You must lie down on a bed and the nurse will check your vital signs (blood pressure and pulse). Together you will go over your medical history. Do not forget to tell the nurse if you have any allergies. An intravenous line will be placed in your arm or hand, where medications and liquids will be administered to you during the procedure.
- Electrodes (small adhesive patches) will be placed on your chest and on the upper part of your back. Men may have their chest shaved partly for the electrodes to adhere.
- You will be given a medication intravenously for you to go to sleep.
- While you are asleep, the doctor will use a special machine (defibrillator/cardioverter) that administers specific amounts of energy to the heart muscle through the patches to restore the normal heart rhythm. Although this procedure will only take a few seconds, various attempts may be necessary.

After the procedure:

- Once you have woken up, the nurse or the doctor will tell you whether the cardioversion succeeded in normalizing your heart rhythm. The doctor will

explain to you what medications you need to take, when to return for follow-up appointments and other treatment options, if necessary.

- Most patients return home after the procedure. A friend or family member must drive you home.

It is possible that you may feel a little pain on the thoracic wall (the chest) for a few days after the cardioversion. The doctor will tell you what creams or medications can relieve this discomfort.