What is a cardioversion?

Cardioversion is a procedure that can restore an abnormal heart rhythm such as atrial fibrillation back to normal. It is carried out under a brief general anaesthetic. A small electric shock is applied to the chest, which normalises the heart rhythm in most patients.

Cardioversion is very effective in restoring the heart rhythm to normal, but it does not prevent the recurrence of the abnormal rhythm.

If the abnormal rhythm has been present for more than 48 hours, you will usually be treated with a blood thinner or anti-coagulant medicine such as Dabigatran or Warfarin for at least 4 weeks before the cardioversion. This is to ensure there is no blood clot in the heart, which could travel to the brain causing a stroke. You will then stay on Dabigatran or Warfarin for 6 weeks after the cardioversion.

The shock is delivered through electrode pads placed on the chest and back. Up to 3 shocks may be given in an attempt to restore a normal heart rhythm.

Occasionally your doctor may recommend a special ultrasound of the heart called a Transoesophageal Echocardiogram (TOE) be performed immediately before the cardioversion. This is to directly view the chambers of the heart and make sure there is no blood clot inside the heart.

Before the cardioversion.

You must not have anything to eat or drink for 6 hours before the procedure.

The test will be fully explained to you. You will then be asked to sign a consent form with your doctor.

An intravenous (IV) line will be placed into a vein in your arm to enable the anaesthetic medicine to be given during the procedure.

During the procedure.

The procedure is done either in the Coronary Care Unit (CCU), an operating theatre, or in emergency department. There will be several anaesthetic staff, a cardiology doctor, and a nurse.

You will be connected to a blood pressure and oxygen monitor. ECG electrodes and leads will be placed on your chest to record the electrical rhythm of your heart throughout the procedure.

Electrode pads will be placed on your chest and back. Excess hair may need to be shaved off first if necessary.
You will need to lie on your back and you will be given some oxygen to breath through a mask before the anaesthetic.

Your blood pressure, heart rhythm, breathing, and oxygen levels will be monitored throughout the procedure.

**After the procedure.**

You will be monitored in either the coronary care unit or the recovery room until you are fully awake.

Once awake you will be able to start drinking with sips of water, building up to other fluids and food as tolerated.

Once you are fully recovered the IV line will be removed and an ECG will be done. You may be discharged after 2-3 hours if well enough.

You should continue taking your usual medication, including Dabigatran or Warfarin if you are on this.

After discharge your cardiologist will review you at a follow-up outpatient appointment.

**Are there any risks?**

There are some small risks which will be explained to you before you are asked to give your consent.

Possible side-effects and complications:
- Chest discomfort—usually minor
- Skin irritation
- Heart rhythm disturbances or low blood pressure
- An adverse reaction to the anaesthetic medicine

**Anaesthetic given during cardioversion.**

Intravenous anaesthetic medication is given routinely for the procedure and there are recognised risks associated with certain activities afterwards.

If you are being discharged with 24 hours of your cardioversion you must have a relative or friend pick you up from the ward because of the effects of the anaesthetic medication.

It is illegal to drive a motor vehicle while the anaesthetic medication is in your system and you are impaired because of its effect.

You should not drive a motor vehicle, operate heavy machinery, sign legal documents or make important decisions for at least 24 hours following your cardioversion.

**Contact Phone Numbers.**

Christchurch Hospital: 364-0640
- when prompted enter extension 89121 for direct dial to Ward12 Cardiology; or
- when prompted enter extension 89141 for direct dial Ward 14 Cardiology/Nephrology

For more information about:
- your health and medication, go to www.healthinfo.org.nz
- hospital and specialist services, go to www.cdhb.health.nz