

WCH Patient Information – Cardioversion.

Last Updated October 15, 2024

What is Cardioversion?

Cardioversion is the process of restoring the heart's normal rhythm from an abnormal rhythm. It can be done through electricity or through medications. We will be pursuing the electrical option, known as electrical cardioversion, direct-current or DC current for cardioversion.

In your case, we are doing an elective cardioversion to treat Atrial Fibrillation, a rhythm disturbance of the upper chambers (atria) of the heart. Atrial Fibrillation usually is not life-threatening but can result in less efficient blood pumping and irregular or fast heartbeat.

What is done during cardioversion?

- Cardioversion is performed by placing two external paddles on the patient's chest or with one on the chest and one on the back.
- A selected amount of energy jolts or electrical pulses is then sent from the paddles through the body to the heart.
- The energy jolts the heart out of atrial fibrillation and back into normal rhythm.

WCH Patient Checklist – Cardioversion

See checklist below – Be sure to read entire package for additional instructions / steps you should know in preparation for Cardioversion

Action:	Date:	Confirm <input checked="" type="checkbox"/>
Cardiology Visit		
Consent to Procedure		
Blood tests		
ECG test		
ECHO Test		
Medications: Daily blood thinners for 4 weeks prior to Cardioversion Other Medications as prescribed.		**Do not skip any doses of your blood thinners prior to the elective cardioversion to decrease your risk of stroke.

Days Prior to Cardioversion

Action:	Date:	Confirm <input checked="" type="checkbox"/>
Pre-Admission Clinic Visit		
Ongoing Blood thinners		

Day before Cardioversion

Action:	Date:	Confirm <input checked="" type="checkbox"/>
Ongoing blood thinner medication		
STOP beta-blocker or non-dihydropyridine calcium channel blocker 24 hours before time of cardioversion		** NOTE to reduce likelihood of bradycardia post cardioversion
Do not eat or drink anything after midnight		

What can you expect?

Elective electrical cardioversion is performed in a hospital setting, recovery room, or a special procedure room.

Before your procedure, you will be asked to visit the Atrial Fibrillation clinic and Cardiology clinic at WCH for

- Blood test Electrocardiography (ECG) and other tests may be performed.
- If you have Atrial Fibrillation, most patients need to be on blood thinners and be well anticoagulated for a minimum of 4 weeks prior to the cardioversion. This is especially important as there is a higher risk of stroke if the cardioversion is done without blood thinners.

NOTE: It is paramount that you do not skip any doses of your blood thinners prior to the elective cardioversion to decrease your risk of stroke.

The team at WCH will explain the risks and benefits of the procedure and you will be asked to sign a consent form.

The Week Before

- You will have an appointment in the Preadmission Clinic. This will include:
 - Pre-registration for your procedure
 - Interview with a nurse who will complete a health assessment
 - Interview with an anesthesiologist for an assessment in preparation for the sedation during your cardioversion.
 - Appointment may take 1-4 hours depending on your health history
 - What to bring to the Preadmission Clinic visit:
 - Health card
 - Any medications you are taking – including all herbal/vitamin supplements and over-the-counter medications (in the original containers)
 - Letters/tests from specialist if indicated by your Cardiologist
 - Support person if required
- Our pharmacist will contact you to review your medications, with a focus on:
 - Making sure you did not miss any doses of blood thinners

- Potentially stopping medications that slow down your heart rate 24 hours before the cardioversion.
- Please note: Interpretation services are available for all non-English speaking and sign language requests. Please notify your Cardiologist's office ahead of time to arrange these services for your appointment if required. You can eat and take your medications as usual on the day of your preadmission clinic visit.

The Night before cardioversion

- After midnight, do not eat or drink anything. Do not chew gum, eat candy, or drink water or other fluids.
- Take a shower or bath. Do not use deodorant, lotions, powder, or perfume on your skin after your bath or shower.
- Remove all make up, lipstick and nail polish.

The Morning of your cardioversion

- Please bring your health card
- Check-in at the Surgery reception desk on the 8th floor at the time provided to you by your doctor's office
- Due to limited waiting room space, we recommend that only one support person accompany you to the hospital
- Your support person is not required to stay at the hospital while you are in your procedure
- Take your medications as instructed by the pharmacist with a sip of water only (50 ml at most).
- Diabetic patients should not take diabetic medications unless instructed by your doctor. Bring your diabetic medication with you.
- Bring all the medications, in the original containers, with you to the hospital.
- Wear comfortable clothing
- Do not bring:
 - Jewelry; remove all body piercings.
 - Perfume/cologne, deodorant, body lotions/creams or scented products
 - Make up
 - Coloured nail polish on fingers (nail polish on toes is acceptable)
 - Leave all valuables - including large amounts of money, credit cards, jewelry, and technology devices at home. The hospital will not be responsible for any lost or stolen items

Before the procedure starts, inform your doctor or NP if you:

- Have ever had a reaction to any contrast dye, iodine, or any serious allergic reaction, for example, from a bee sting or from eating shellfish.
- Have asthma.
- Are allergic to any medication.
- Have any bleeding problems or are taking blood-thinning medication
- Have a history of kidney problems or diabetes.
- Have body piercings on your chest and/or abdomen.
- Have had any recent changes in your health.
- Are, or may be, pregnant.

During the Procedure:

- You will be asked to change into a hospital gown
- A nurse will perform your admission for the procedure
- You will be brought to the procedure area where an IV will be started, and you will be connected to a cardiac monitor, and we will monitor your blood pressure and heart rate.
- ECG would be completed to confirm Atrial Fibrillation, and the cardioversion pads will be placed on your chest.
- NP/cardiologist and anaesthesiologist will be present during your cardioversion.
- Because the shock may be uncomfortable, sedation is administered intravenously by an anesthesiologist or specially trained nurse. Once you are sedated:
- Once you are sedated the shock will be administered by your Cardiologist.
- Additional shocks at higher energy levels can be delivered if the first shock does not restore the rhythm back to normal.
- Minor skin irritation can occur at the site of the cardioversion pads.
- Patients wake up quickly and without any memory of the shocks.
- After your cardioversion, you will stay in the recovery room until you are ready to go home.
- Your stay will be approximately one hour before you are ready to be discharged home.
- The nurse and/or pharmacist will provide you with discharge instructions

How should I plan for my discharge from hospital?

Because you were given medication for pain and to help you relax during your procedure, you might feel sleepy for the rest of the day.

It is particularly important to ensure you have a responsible adult with you to drive you home and always stay with you during the first 24 hours that you are at home after your cardioversion. In addition:

- For 24 hours following the procedure, you should not drink alcohol or take sedative drugs, except as ordered by your doctor.
- Do not drive for 24 hours.
- Do not operate heavy machinery.
- Do not make important decisions for at least 24 hours. This is because of the sedation you have received during your cardioversion.
- Keep your activities light the first day after your cardioversion.
- Eat what you normally would. If you feel sick to your stomach, eat lesser amounts of bland foods.
- Continue with your present medications unless you are told to change by your internist/cardiologist.
- You will be taking your blood thinners for a minimum of 4 weeks after cardioversion and your cardiologist will advise you if you need to take them indefinitely.
- Drink small amounts of fluids such as water, juice, and ginger ale.

Sometimes the skin under the cardioversion pads gets red and sore. It can feel like a mild sunburn. This should go away over the next few days. Soothe your skin with cool cloths. Contact your doctor if you notice blisters, or if the soreness gets worse or does not go away.

When should I seek medical attention after a cardioversion?

You will have a follow up appointment to see the cardiologist 1-2 weeks after your cardioversion. However, if you develop certain symptoms, you should seek medical attention sooner. Make an urgent appointment with your doctor if:

- Your pulse or heart rate becomes irregular or very fast over 110 beats per minute at rest.
- You feel lightheaded or dizzy.
- You have shortness of breath.
- You have questions or concerns.

Call 9-1-1 immediately if:

- You have weakness or numbness on one side of your body.
- You have sudden changes in your vision or speech.
- You faint or feel like you are going to faint.
- You have increasing chest pain or chest pain that is new for you.

Resources

The following resources have more information on cardioversion:

- [Heart and Stroke Foundation: Cardioversion therapy](#)
- [American Heart Association: Cardioversion](#)
- [Mayo Clinic: Cardioversion](#)
- [Heart and Stroke Foundation: Recovery and support](#)

If you have further questions, please contact the WCH Cardiac Clinic at:
(416) 323-7723