Pacemaker or ICD Lead Laser Extraction
What is a cardiac lead?

A cardiac lead is a special wire attached to your pacemaker or your Implantable Cardiac Defibrillator (ICD).

The lead sends energy from the pacemaker or ICD directly to the heart muscle.
Will there be a follow-up appointment?

Arrangements will be made for your follow-up appointment in the Arrhythmia Clinic 7 to 10 days after your procedure.

It is important that you attend all appointments before and after your procedure.

Why do I need a lead extraction?

Your doctor has determined that your lead needs to be removed for one or more of these reasons:

- there is damage to the lead.
- the lead may not be able to give enough energy for the pacemaker or ICD to work because of scar tissue.
- there is an infection at the site of the device and/or lead.
- the lead is blocking the flow of blood in the vein where it is located.

What is a laser lead extraction?

Laser lead extraction is the removal of one or more leads from inside the heart using a laser to help release the wire.

During laser lead extraction:

- an incision is made usually in the same area where your pacemaker or ICD was put in.
- a special tube (sheath), that is placed over the lead, is put in the vein where the lead is located.
- a laser device is put through this sheath to remove any scar tissue that is attached to the lead. This helps the doctor remove the lead.
What are the risks of laser lead extraction?

Your doctor will explain your risks to you before the procedure and ask you to sign a consent form. Make sure you understand the risks and benefits of the procedure before you sign the consent form.

How do I get ready for the procedure?

In the weeks leading up to your procedure you will be:

• notified once a procedure time is booked for you. You will have your procedure done at the Hamilton General Hospital.

• given an appointment for the Arrhythmia Clinic at the Hamilton General Hospital to meet with the doctor who will do the procedure. You will have an ECG and you may have blood work taken at this time.

• given an appointment for the Pre-Op Clinic at McMaster University Medical Centre.

If you are on blood thinners, an appointment will be made for you with the Thrombosis Service at the Hamilton General Hospital. They will manage that medication before and after your procedure.

You will also need to buy 2 packages of Chlorhexidine scrub sponges. You can buy the sponges at the Outpatient Pharmacy (drug store) located in the lobby of the Hamilton General Hospital.

When you go home (continued)

• You may remove your bandage the morning after you leave the hospital.

• You may shower the morning after you leave the hospital. Do not soak in water such as a pool, hot tub or bathtub for the next 3 days.

• You can walk or do gentle exercises when you get home. Do not do strenuous exercise for the next 3 days.

• Call the Arrhythmia Clinic (see information on page 10) if you notice:

  • the incision where the lead was removed becomes increasingly red or drains pus-like fluid.

  • the incision becomes very tender to touch.

  • the incision is warm to the touch or swollen.

  • you have a fever or chills.

Ask your doctor when you will be able to return to work. The type of work you do will determine when you can return.
Will my medications change after the procedure?

If there are any changes to your medications, the doctor will let you know.

Before you go home, talk about your medications with your doctor or nurse.

When you go home

- Although you may feel fine the day after your procedure, the effects of the sedation may still be with you. Arrange for someone to drive you home from the hospital. Do not operate heavy equipment or power tools. You may want to delay signing contracts or making financial decisions that day.
- Limit your lifting to less than 4 kilograms or 10 pounds for the next 2 to 3 days.
- If you see blood on your bandage, place firm pressure on the area for 5 minutes. If bleeding continues, call your doctor or go to the Emergency Department.
- If you develop a lump under your bandage and it continues to get bigger, place firm pressure on the bandage. Then, call your doctor or go to the Emergency Department.

The night before your surgery

- You may eat and drink until 12:00 midnight.
- After midnight, you cannot have anything to eat or drink. This includes sucking candies and chewing gum. You can take sips of water to take your medications the morning of your surgery.
- Remove any nail polish.
- Shower normally making sure that all soap and shampoo is rinsed off.
- As you finish your shower, using one of the scrub sponges you purchased, wash the front of your body from your chin to your knees. Avoid scrubbing your skin too hard.
- Never use the sponge near your eyes.
- Once you have completed the scrub, rinse the soap solution off your body completely.
- Pat yourself dry with a clean, freshly washed towel. DO NOT apply any powders, deodorants or lotions.
- Dress in clean clothes.
The morning of your surgery:

- Wash your body with the 2nd scrub sponge, as you did the night before.
- Remove contact lenses, make-up, earrings and all other jewellery.
- Do not eat or drink.
- Take any medications as instructed.
- Once you arrive at the Hamilton General Hospital, go to Patient Registration on the Main Level.
- After you have registered, you will go to Same Day Surgery on the Main Level. Patient Registration staff will direct you to Same Day Surgery.

You may have 1 or 2 family members or friends with you before and after your procedure.

In Same Day Surgery:

- You will change into a hospital gown.
- An intravenous (IV) line will be started in your arm. The IV is used to give you fluids and medications if you need them.
- You will have hair clipped from your chin to your knees.
- You may be given some sedation to help you relax.
- You will then be taken to the Operating Room holding area until it is time for your procedure.

What can I expect in the Operating Room?

- A team of doctors and nurses will greet you. They will be wearing operating room clothes. You will meet the doctor who will do the procedure.
- You will be attached to a heart monitor and a blood pressure cuff.
- A small clip will be attached to your finger to check the oxygen in your blood.
- Defibrillator pads are sticky pads which will be placed on your back and to one side of your chest. The pads allow the doctors and nurses to deliver energy to your heart if the rate is too fast or to pace your heart if it is too slow.
- The anesthesia doctor will put you to sleep. Your chest and both groins will be cleansed with a special soap. Sterile drapes will be applied. They will cover you from your neck to your feet.
- You may also have other IV lines put into your wrist and/or groin if needed.
- You may have a catheter put into your bladder.

The procedure will take 2 to 4 hours. You will be transferred to the Coronary Care Unit (CCU) after the procedure to be monitored overnight.
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The Arrhythmia Clinic

4th Floor, Section E
Hamilton General Hospital
237 Barton St. East
Hamilton ON
L8L 2X2

Phone: 905-527-4322, ext. 49084

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Notes and questions

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