

Lead Extraction and/or Lead Revision

Your cardiologist is requesting for you to be scheduled for a Lead Extraction or Revision. One of our hospital procedure coordinators will be contacting you within the next 48 hours to interview and schedule a procedure date for you. Please have this packet available for your phone call as they will also review the attached instructions with you at that time and answer any questions you may have. Should you need to contact our scheduling department, please call the main number, 609-584-1212 and ask to speak with the procedure scheduling department.

The hospital will contact you directly to schedule your pre-testing appointment.

PRE-TESTING:

DATE: _____ TIME: _____

PROCEDURE LOCATION: SFMC RWJ-New Brunswick (Dr. Wjasow only)

PERFORMING: DR. Caplan Dr. Wjasow Dr. Sanyal

DATE: _____

FOLLOW UP APPT: at the Madison Office

Dr. Caplan Dr. Wjasow Dr. Sanyal

Date: _____ Time: _____

Lead Extraction and/or Lead Revision

In patients who have both pacemakers and defibrillators, there are two components: the pulse generator and the leads. The leads are wires that run between the pulse generator and the heart to deliver energy. This energy can help the heart to beat more quickly or can deliver energy to stop a dangerous rhythm. These leads are designed to stay in the heart long-term. There are various reasons which may require a lead extraction or a lead revision.

Lead Extraction: There is a reason your device and/or leads need to be removed. This is often because of an infection on your devices lead.

Lead Revision: Sometimes the leads to your device can move and need to be repositioned or fail and need a new lead placed alongside the old one. Sometimes new leads need to be added to upgrade the device for additional pacing capacity. These are all examples of a lead revision.

Why do I need a lead extraction?

The most common cause for a lead extraction is a device infection. If any part of the system becomes infected, usually the entire system needs to be removed to stop the infection. Infection in a valve of the heart can also require the system to be removed.

Another reason for a lead extraction is a break, or fracture, in the lead. Sometimes the broken leads will be left in place and a new lead will be placed, but sometimes due to space restraints, they will need to be removed.

Other, less common, reasons a lead may need to be extracted are:

- Dangerous or malfunctioning leads (like a protruding wire)
- Recall on a specific lead
- Clot formation on a lead that obstructs a vein
- Retained lead triggering abnormal heart rhythms or other complications
- The need for radiation close to the site of the pacemaker or defibrillator

Why do I need a lead revision?

You will need a lead revision for one of the following reasons:

- have a new lead for your pacemaker – this may be required due to an upgrade of your pacemaker, or due to
- failure of an existing lead
- have an existing lead repositioned – this is required when a lead displaces (moves) and is no longer pacing effectively
- have an upgrade to a different device – your needs may have changed and you now need a different type of device

How is a lead extraction preformed?

The procedure can take anywhere from 2 to 6 hours. During the procedure:

- You will be give anesthesia before the surgery starts. Afterwards, you won't remember it.
- An incision is made over the area where the leads attach to the pulse generator.
- Next, the leads are removed from the heart using a sheath. A variety of methods and tools can be used depending on your situation.
- If you require lead reposition/a new lead, they will be repositioned or inserted through a vein in your heart using X-ray screening for guidance. They are then attached to the pacemaker.
- The team will carefully monitor you throughout the procedure.
- The team will remove the leads and sheath through the blood vessel. In some cases, they also might place new leads at this time.
- The team will close and bandage the site where they inserted the sheath.

What happens after the procedure?

In the hospital:

- You will spend several hours in a recovery room.
- The team will monitor your vital signs, such as your heart rate and breathing. They will also monitor your heart rhythm.
- If the extraction involved using a vein in your leg, you will need to lie flat for several hours after the procedure. You should not bend your leg, this will help to prevent bleeding.
- Time in the hospital varies, but you will likely spend a minimum of one night.
- You will need a follow-up chest X-ray to check your heart and lungs after the procedure.

At home:

- You will probably be able to return to light activity relatively soon.
- You may have sutures that you will need to have removed after the procedure.
- You should minimize overhead movements until cleared by your doctor.

- Call your doctor if you have increased swelling, increased bleeding or drainage, or a fever.

After you leave the hospital, it is important to follow all the instructions your doctor gives you for medicines, exercise, diet, and wound care. Be sure to keep all your follow-up appointments.

Pre-Admission Testing

- The hospital will call you to schedule your pre-admission testing appointment
- During this appointment, you will be interviewed by a nurse, who will review your medical history and medications
- Bring all medication bottles in a zip lock bag, or a detailed list of your medications including dosage and frequency
- Fasting blood work, EKG, and CXR may be performed at this appointment.
- Take all medications as prescribed
- HCA will contact your insurance for pre-authorization. If a referral is required, we will fax a referral request to your primary care physician with all the necessary information.

Before The Procedure

- You **CAN NOT** drive yourself the day of your procedure.
- No solid food or drink after midnight including gum or candy.
- You may take your usual medications with a sip of water the morning of the procedure, except diabetic medications
- Diabetic patients: Do not take diabetic medications or Insulin the morning of your procedure
- Coumadin/ Eliquis/Xarelto/Savaysa/Pradaxa patients: You may have been given a stop date, if not or have questions regarding medication instructions please call the office.
- If you develop symptoms of a cold, flu or fever or if you have been exposed to any communicable diseases (chicken pox, shingles, mumps, measles or tuberculosis) since your preadmission visit, immediately notify us.
- The hospital will call you the afternoon prior to your appointment to let you know the arrival time.

- Be prepared to stay overnight as there is always a possibility you will be admitted following your procedure. If you are discharged the same day, you **MUST** have someone to stay with you that night.

Discharge Instructions

Post Lead Extraction

You will be required to spend 1 night in the hospital, once discharged you may resume your normal activities.

If a new device or new leads were placed please see below instructions.

Post Lead Revision

- Do not lift your arm above your shoulder for 2 weeks. We have provided an arm sling to remind you of this limitation for a few days. Please remove the sling and exercise your elbow frequently.
 - Do not lift anything heavier than 5 pounds for 2 weeks.
 - Do not drive for 2 weeks.
 - Avoid sexual activity and /or vigorous exercise for 2 weeks.
 - Walk and climb stairs without limitation as long as you feel able to do so.
- All of the above mentioned limitations are recommended because the wires that the doctor has inserted require time to become permanently imbedded in the tissues of your heart. Certain activities involving lifting and movement can easily dislodge the placement of these wires, requiring additional surgery to repair.

Wound Care

- Upon leaving the hospital, there may be a transparent dressing over the site. Leave this dressing in place until your follow-up visit. The doctor may have used dermatologic “glue” to assist in the closure of the incision. In this case, there would be no dressing. Others have a “pressure” dressing. This is a larger dressing that will need to be removed daily so that the site can be checked. We will arrange for a visiting nurse to come to your house on the first day after discharge to provide further instructions.
- You may shower as usual. Allow the water to run over the transparent dressing. *Please do not rub the area.* The dressing should remain intact until it is removed at the follow-up appointment. Please remove the dressing only in the following situations: moisture invades the dressing or there is a foul smell over the area. If

you have a “pressure” dressing, you may shower when it is removed daily and reapply thereafter.

- Please notify the office for any of the following symptoms:
- Bleeding, swelling, purulent discharge, or redness at the incision site
- Fever greater than 100.5, or chills
- Dizziness or lightheadedness

Follow UP

- You should have an appointment for an incision check within 7-10 days after discharge, if not please call the office 609-584-1212
- Maintain you regular appointment with your primary cardiologist
Read the instruction manual that accompanies the device.

Medications

- You may have been given a prescription for an antibiotic to prevent infection, please use as directed
- Thank you for allowing Hamilton Cardiology to participate in your care. Your cardiovascular health is out priority. Please contact the office for any further questions or concerns.