

Heart Biopsy

How to prepare and what to expect

A heart biopsy is the best way to diagnose heart rejection after transplant. It is done in the Catheterization Lab (Cath Lab) under sterile (germ-free) conditions. Your transplant coordinator will contact you with your results the day after your biopsy.

If you need to reschedule or cancel your biopsy, please call 206.598.2953 right away.

Phone Call Before Your Procedure

We will call you **3 to 7 days** before your procedure. During this call:

- We will review your medicine list and allergies and answer any questions you may have. There may be some medicines you need to stop taking on the day of your procedure, but this rarely happens.
- Please tell us if you have any concerns about who will drive you home after your procedure. **You cannot drive yourself home or take a bus or taxi by yourself.**

If you do not receive this call by 3 days before your appointment, call the nurse at **206.598.2953**.

How to Prepare

- **Make plans.** Please plan for this procedure to take most of the day. If you are from out of town, you may want to make a hotel or motel reservation, or make other plans to stay overnight.
- **Time your evening doses of anti-rejection medicines.** You will have a blood draw 1 hour before your heart biopsy. Take your evening doses of antirejection medicines **12 hours before your blood draw.**
- Do **not** eat or drink anything for 6 hours before your biopsy.



Your blood draw must be done 12 hours after you take your evening doses of anti-rejection medicines.



Remember!

- Do **not** eat or drink anything for 6 hours before your biopsy.
- You must have a blood draw **1 hour before** your biopsy.
- Be **on time** for your appointment.



*If you have sedation for your biopsy, you must have a responsible adult drive you home afterward. You **cannot** drive or take a bus or taxi by yourself.*

- Bring your morning doses of anti-rejection medicines with you to the hospital. You will take them after your blood draw.

If You Have Diabetes

Follow these instructions:

- **If you take insulin:** You will need to talk with your diabetes care provider **before** your biopsy. Ask this provider how to adjust your insulin doses the night before and morning of your biopsy.
- **If you manage your diabetes with oral medicine:** Do not take your diabetes pill(s) the morning of your biopsy.

If You Have ANY Sedation

Plan to have a responsible adult take you home after your procedure. You may not take a bus, shuttle, taxi, or any other transportation by yourself. Sedation can make you sleepy, and make it hard for you to think clearly.

Procedure Day

Do **NOT** go to the Cardiac Procedures Unit until after you have had your blood drawn and have checked in at the Admitting and Reception.

To Check In

- Enter the hospital through the **main entrance** on Pacific Street. You will be on the 3rd floor of the hospital.
- You will need to have your blood drawn first. Your blood draw should be done 1 hour before your scheduled biopsy time.
- When you enter the hospital, you will see the Information Desk in the lobby. The Lab is down the hall to the left of the Information Desk. As you walk down that hall, you will see the Blood Draw sign on your right, just after the Outpatient Pharmacy.
- After your blood has been drawn:
 - **Take your morning dose of anti-rejection medicines.**
 - **Go to Admitting.** This office is down the hall to the right of the Information Desk. Tell them that you are checking in for your heart biopsy. Their phone number is 206.598.4310.

After you have done these 3 things:

- Had your blood drawn
- Taken your morning dose of anti-rejection medicines
- Checked in at Admitting

Go to Cardiac Procedures on the 2nd floor of the hospital:

- From Admitting, go back to the lobby and turn left. Go along the main to the Pacific elevators. Take the elevators to the 2nd floor.
- As you step off the elevator, you will see a phone on the wall to your right. Pick up the handset and press Key 1, labeled **“Cardiac Procedures Visitors.”** You will be connected to the Procedural Nurse who will tell you what to do next.

We will do our best to start your procedure on time. But please be patient if emergencies in the hospital cause a delay.

Preparing for the Biopsy

- You will change into a hospital gown.
- We will take your blood pressure and temperature.
- A nurse will ask you about your health history. This includes questions about any allergies you may have and your current medicine list.
- You will meet with the doctor who will be doing your biopsy. Your doctor will explain the biopsy to you and talk with you about risks and side effects. The biopsy has some risks, and some patients have had side effects from the medicines that are used. Please be sure to ask any questions you have.
- We will ask you to sign a consent form that gives us permission to do your biopsy. You may decide not to sign the form. We will not do the biopsy if you do not give your consent by signing the form.

Your Biopsy

- The doctor will numb your neck, and then make a small puncture.
- A thin hollow tube called a Swan Ganz catheter will be inserted through the puncture and into a vein. The doctor will carefully move the catheter through your vein into the *right atrium* (upper chamber) of your heart.
- The Swan Ganz catheter will then be removed. A *biopsy* will be inserted. A biopsy is a tiny instrument that will collect a small amount of tissue from your heart. This tissue will be sent to the pathology lab.
- After the procedure, we will hold pressure on the puncture site until the bleeding stops. We will place a dressing (bandage) over the site.

- You will then go to the Radiology department for a chest X-ray. This is done after every biopsy.
- Then you can go home, unless you have another appointment.

If a vein in your groin is used for the procedure:

- You will be taken back to the prep/recovery unit. You will need to lie flat for about 2 to 4 hours to let the groin site heal. Your nurse will help you be comfortable.
- You will be able to eat as usual.
- Then you will be able to go home, unless you have another appointment.

Things to Remember

- You may also have a clinic visit the same day as your biopsy.
- You may have pain at the incision site. We suggest you use acetaminophen (Tylenol) for pain relief.
- You may also have bruising at the incision site. This is normal. It may take 2 to 3 weeks to go away.
- If the dressing becomes soaked with blood, apply direct pressure and a new dressing. If the bleeding continues, go to the emergency room to be checked.

When You Get Home

Activity Precautions

- **For 24 hours** after your biopsy:
 - Rest quietly at home
 - If you had sedation, see page 5
- Starting 24 hours after your biopsy, you may:
 - Shower
 - Return to light activity
 - Drive

If Your Biopsy Used a Vein in Your Neck

- For **48 hours** after your procedure:
 - Avoid strenuous activity, such as housework, gardening, or any self-care tasks that can wait until later.

If Your Biopsy Used a Vein in Your Groin

- For **48 hours** after your procedure:
 - Do **NOT** do anything that puts stress on your puncture site. This includes housework, gardening, and many self-care tasks. Ask for help with any tasks that need to be done during this time.
- For **7 days** after your procedure:
 - Do **NOT** lift anything that weighs more than 10 pounds (4.57 kilograms). This includes pets, groceries, children, trash, and laundry. (A gallon of water weighs almost 9 pounds.)
 - Do **NOT** hold your breath, bear down, or strain when having a bowel movement.
 - Do **NOT** allow the puncture site to be covered by water. This means do not take a bath, sit in a hot tub, or go swimming.
 - You may go up and down stairs, but limit how much you do this.

If You Had Sedation

For **24 hours** after your procedure:

- Do **NOT** drive. Make sure you have a responsible adult who can help you during this time.
- Do **NOT** be responsible for children, pets, or an adult who needs care.
- Do **NOT** drink alcohol or take drugs other than the ones your doctors prescribed or suggested.
- Do **NOT** make important decisions or sign legal papers.

Site Care

- Keep the site clean and dry.
- You may remove the dressing 24 hours after your procedure.
- After you remove the dressing, gently clean the site with mild soap and water. Do **not** scrub or rub the area. Lightly pat dry with a clean towel.
- You may shower the day after your procedure, but do **not** take a bath, sit in a hot tub, or go swimming for 5 days.
- For the next 3 days, check for signs of infection. Get medical care right away if you have:
 - Redness or drainage at the site
 - Fever higher than 101.5°F (38.6°C)

- You may have a bruise at the insertion site. This is normal. Over the next day:
 - If the procedure used your neck vein, the bruise might spread down your neck.
 - If the procedure used a vein in your groin, the bruise might spread down your leg.

It may take **2 to 3 weeks** for the bruise to go away.

When to Call

- Get medical care **right away** if you have any of these symptoms:
 - Shortness of breath
 - Chest pain
 - Irregular heart beat
 - Signs of an infection
- If you have a lot of pain or swelling at the groin catheter site, call the cardiologist who did your procedure.

If you have heavy bleeding or a lot of swelling, put pressure on the site and call 911.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Regional Heart Center:
Weekdays 8 a.m. to 5 p.m.,
call 206.598.4300.

After hours and on weekends and holidays, call 206.744.2500. Say you are a heart transplant patient. A nurse will assess your concern and help you.

Biopsy Results

Most times, you will get your heart biopsy results the next day. The results are on a grading scale. The chart at right shows the possible results.

The nurse coordinator will talk with you about results from both your biopsy and your blood test. Based on these results, we may adjust your medicine doses or prescribe other treatments.

Grade	What It Means
0	No significant rejection
1A	Mild rejection
1B	Mild to moderate rejection
2	Moderate rejection
3A	Severe rejection
3B	Very severe rejection
4	Widespread rejection