UW Medicine

UNIVERSITY OF WASHINGTON MEDICAL CENTER

Right Heart Catheterization

At UW Medical Center - Montlake Campus

This handout explains how to prepare and what to expect when you are scheduled for a right heart catheterization at UWMC - Montlake campus.

Your Appointment

Your procedure is scheduled for:

Date: _____ Time: _____

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

Phone Call Before Your Procedure

A Cardiac Procedures nurse will call you **3 to 7 days** before your procedure. The nurse 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.

Please tell this nurse if you have any concerns about who will drive you home after your procedure. **You cannot drive yourself home or take a bus, taxi, or shuttle by yourself.**

- If you do not receive this call by 3 days before your procedure, call the nurse at 206.598.8435.
- If you need to change or cancel your appointment, call
 206.598.8200 right away.

Procedure Day

You will need to have your blood drawn first. Your blood draw should be done 1 hour before your scheduled procedure time.

Do **NOT** go to 2nd Floor Pacific Admitting until after you have had your blood drawn.



On the day of your procedure, first go to Blood Draw, then to 2nd Floor Pacific Admitting.

Blood Draw

- Enter the hospital through the **main entrance** on Pacific Street. You will be on the 3rd floor (main level) of the hospital.
- When you enter the lobby, you will see the Information Desk. Blood Draw 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.

Check In

After your blood has been drawn, go to 2nd Floor Pacific Admitting:

- Walk across the main lobby to the Pacific elevators. Go down to the 2nd floor.
- As you get off the elevator, turn left. Go down a short hallway. You will see a sign on your right that says **2nd Floor Pacific Admitting**. Inside that room, a staff person at the desk will check you in for your procedure.

How to Prepare

- You cannot eat for 6 hours before your procedure. You may also need to stop taking some of your medicines for a short time. Follow the "Fasting" and "Medicines" instructions under "At Home on Procedure Day" on page 6.
- **Talk with the nurse by phone before your procedure.** A Cardiac Procedures nurse should call you 3 to 7 days before your procedure. The nurse will review your medicine list and ask if you have any allergies. You may be told not to take some medicines the day of your procedure, so it is very important for the nurse to review your full medicine list.
 - If you do not receive this phone call by 3 days before your appointment, call 206.598.8435 for instructions.
 - If you do not talk with the nurse by phone, we will review your medicines and allergies when you arrive for your procedure.
- **If you take warfarin (Coumadin)**: Before your procedure, talk with the provider who prescribed this medicine for you. You will need instructions about whether to stop taking it, and when.

Phone Numbers

- To speak with a Cardiac Procedures nurse, call 206.598.8435.
- To change or cancel your procedure, call 206.598.8200.

About This Procedure

Your provider has referred you for a *right heart catheterization*. This procedure shows how well the right side of your heart moves blood from your body into your lungs. This procedure will help your doctor diagnose certain problems in your heart or lungs.

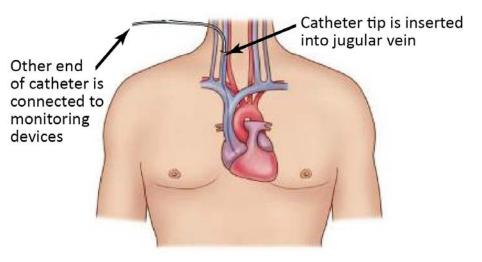
During the procedure, X-ray and ultrasound images may be used to see details of your heart. The pressures inside your heart will also be measured. Your doctor will study this information to see how well your heart's chambers, valves, and other structures are working.

What to Expect

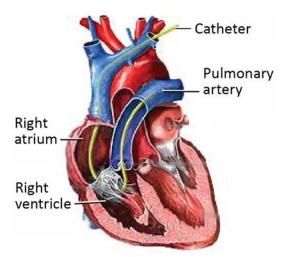
Placing the Sheath

Your doctor will first place a *sheath* (short hollow tube) into your vein. Most times, the sheath is placed in a *jugular vein* in the neck (see drawing below). Very rarely, a different vein is used. The vein that is used will affect how long you need to stay in the hospital after your procedure.

When the sheath is placed, you may feel pressure, but you should not feel pain. If you have any pain, please tell your doctor.



For this procedure, a catheter (tube) will be inserted into a vein, most likely a jugular vein in your neck.



The catheter is moved through your right atrium, right ventricle, and pulmonary artery.

Pulmonary Artery Catheter

After blood flows through your body, it returns to the right side of your heart. Then it is pumped into your *pulmonary artery,* the main vessel that carries blood to your lungs.

After the sheath is placed, your doctor will put a *pulmonary artery catheter* (a long, thin tube) through the sheath. The catheter will be moved into the right side of your heart.

As the catheter is moved through your heart, your doctor will measure pressures inside your *right atrium* and *right ventricle* (see drawing at left).

Your doctor will also measure pressures on the left side of your heart. This is done by inflating a tiny balloon at the tip of the catheter. Your doctor will do this after the catheter reaches your pulmonary artery.

Heart Medicines

This procedure is often done to check how well your current medicine is working. It may also be done to help your doctor decide what medicine you should be taking.

The provider who referred you for this procedure will receive the results right away. Please follow up with this referring provider, not the doctor who does the procedure.

Heart Monitoring

The right heart catheter is sometimes left in place to monitor how different heart medicines are working. This may be done if the blood output from your heart is too low, or the pressures in your heart and lungs are too high. This monitoring helps your doctor find the best medicine to improve how your heart works.

If you are being monitored in this way, you will stay in the intensive care unit (ICU) overnight or for a few days. Your length of stay will depend on your condition and how long your doctor wants you to be monitored.

Before Your Procedure

Being prepared for your procedure will help make your hospital stay go as smoothly as possible. Here are some things you should know: • You may need to stop taking some of your medicines for a short time before your procedure. Most times, you will be able to start taking them again after the procedure. The nurse who calls you will tell you if you need to make any changes in your medicines.

Sedation and Local Anesthetic

Before this procedure, you will need to decide if you want to receive:

- **Only** *local anesthetic*. This medicine will numb the area where the sheath is inserted. You will be fully awake during the procedure. If you have only local anesthetic:
 - You can return to your usual activities after your procedure.
 - You may drive yourself home and will not need to have someone stay with you there.
- **Both** local anesthetic and *sedation*. Sedation will make you relaxed and sleepy during the procedure. If you have both sedation and local anesthetic:
 - You may receive oral sedation in pill form or by *intravenous line* (IV). If you have IV sedation, an IV will be inserted into a vein in your arm.
 - You may **not** drive yourself home.
 - Most patients do not have sedation for this procedure, and do not have any complaints during or after the procedure.

At Home on Procedure Day

Fasting

- Starting at least 6 hours before your procedure, do NOT eat or drink anything. If you finish eating at least 6 hours before your check-in time, you may have a light meal or snack.
 - For example, a light snack of tea and toast is OK, but do **not** eat high-fat foods such as bacon, sausage, or eggs for at least 8 hours before your check-in time.
- Most patients tell us that having something to eat and drink in the morning helps the day go more smoothly, lowers stress, and improves their overall mood. If you wake up more than 6 hours before your procedure, try eating a light snack. If you want to eat a small meal, set your alarm for more than 8 hours before your procedure.

Medicines

- If you do not need to make any changes to your medicines, take your usual morning medicines with **only** small sips of water.
- Important: If your doctor has prescribed aspirin for your heart health, take it as usual the morning of your procedure.

What to Bring to the Hospital

Please bring these items with you on the day of your procedure:

- **A list of all medicines you now take.** For all medicines, write down the dose and how often you take each one. Include all non-prescription products such as multivitamins, other vitamins, and herbal supplements.
- Any other medicines, including vitamins and supplements, you have taken in the last 2 days.
- If you are having sedation, the name and phone number of your contact person and the person who will take you home. This may be the same person, or two different people. The person who takes you home must be with you when you receive instructions before you leave the hospital.

At the Hospital

While you are in the Cardiac Procedures Pre-Procedure area:

- You will change into a hospital gown.
- A nurse will ask questions about your health history. We want to know about any allergies you have and to review your current medicines.
- We will take your blood pressure and temperature.
- If you will have IV sedation, we will place an *intravenous* (IV) line into a vein in your arm.
- You will meet with the doctor who will be doing your procedure. Your doctor will explain the procedure to you and talk with you about risks and side effects. 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 procedure. You may decide not to sign the form. The procedure will not be done if you do not give your consent by signing the form.
- You may have 1 or 2 family members wait with you in our Pre-Procedure area. During your procedure, your family may wait in a nearby waiting area.

In the Catheterization Lab

- We will help you get onto a special table that has a camera above it. The table will slide back and forth during the procedure. This table and camera help your doctor see the blood vessels and chambers of your heart from different angles.
- We will attach *electrodes* to your skin with a gel. They will monitor your heart rhythms.
- We will cover you with *sterile* (germ-free) paper sheets.
- If you received sedation, you will start to feel relaxed and sleepy.
- We will clean your neck with an antiseptic solution. We may also shave the area, if needed. This will help prevent infection.
- Always ask your doctor or nurse if you have any questions or do not understand any part of your procedure.

After Your Procedure

After your procedure, you will be taken to Cardiac Procedures Recovery.

- If your doctor decides you do not need recovery time or you did not have sedation, a nurse will give you instructions and you may leave the hospital.
- If you had sedation, you may stay in Recovery for a short time. Your blood pressure and vital signs will be checked often.
- You may eat as usual.

Leaving the Hospital

If you did **not** have sedation, you may drive yourself home.

If You Have ANY Sedation

Sedation can make you sleepy, and make it hard for you to think clearly. For your safety and the safety of others:

- A responsible adult must take you home after your procedure. You may not take a bus, shuttle, taxi, or any other transportation by yourself.
- For the next 24 hours:
 - Do **NOT** drive.
 - Make sure you have a responsible adult who can help you as needed 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.

Activity Restrictions

- **For 24 hours** after your procedure, rest quietly at home. If you had sedation, see "If You Have ANY Sedation," above.
- Starting 24 hours after your procedure, you may:
 - Shower
 - Return to light activity
 - Drive
- For 48 hours after your procedure, avoid strenuous activity, such as housework, gardening, or any self-care tasks that you can do later.

Pain Control

Some people are sore for 1 to 2 days where the catheter was inserted. If you need medicine for pain relief:

- You may take acetaminophen (Tylenol). Follow the instructions on the package.
- Take your regular aspirin as prescribed for your heart, but do **not** take more aspirin for pain.
- Do **not** take other products that contain aspirin.
- For 5 days, do **not** take ibuprofen (Advil, Motrin), naproxen (Aleve, Naprosyn), or other anti-inflammatory medicines. They may cause increased bleeding.

Site Care

- Keep the site clean and dry.
- You may remove the dressing or bandage 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. Gently 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. Call the cardiologist who did your procedure if you have:
 - Redness at the site
 - Fever higher than 101.5°F (38.6°C)
 - Drainage from the site
- You may have a bruise where the catheter was inserted. This is normal. The bruise may spread down your neck over the next day. It may take 2 to 3 weeks for the bruise to go away.

When to Call

If you have a lot of pain or swelling at the 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.

Call 206.598.6190 and ask to page the Cardiology I Fellow on call if you have:

- **Swelling or blood oozing** where the catheter was inserted, that does not stop after you apply pressure for 10 minutes
- Severe pain that is not relieved by acetaminophen (Tylenol)
- Any signs of infection:
 - Redness or drainage at the site
 - Fever higher than 101.5°F (38.6°C)

Follow-up Care

- Keep taking your prescribed medicines unless your doctor tells you otherwise.
- Follow up with your primary care provider after your procedure, as instructed.

Driving Directions

UWMC - Montlake campus is at 1959 N.E. Pacific St., just south of the University of Washington campus. (See map below.)

From Interstate 5:

- Take Exit 168B (Bellevue, SR 520) heading east.
- Next, take the Montlake Blvd. exit. Turn left onto Montlake Blvd.
- After crossing the bridge, turn left onto Pacific St. UWMC is on your left.
- For the Triangle Garage, take the next right onto N.E. Pacific Pl.

From Interstate 405:

- Take Exit 14 (Seattle via Evergreen Point Bridge, SR 520) going west.
- Then take the Montlake Blvd. exit. Veer right onto Montlake Blvd.
- After crossing the bridge, turn left onto Pacific St. UWMC Montlake campus is on your left.



• For the Triangle Garage, take the next right onto N.E. Pacific Pl.

Parking

Triangle Parking Garage

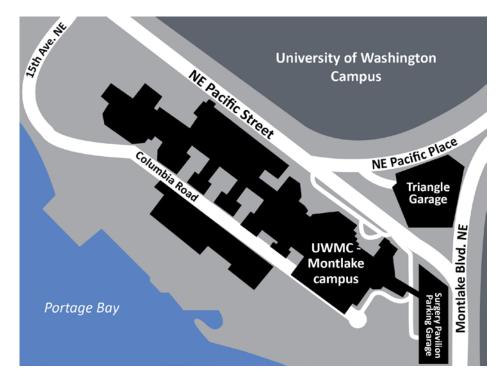
Patient parking is in the Triangle Garage. The Triangle Garage is on N.E. Pacific Place, across the street from the hospital (see map below). It is underground. A walking tunnel connects the garage to the hospital's main entrance.

Parking Validation

Parking in the Triangle Garage can be validated to reduce your cost. Bring your parking ticket with you to the hospital. Ask for a validation sticker when you check in at Cardiac Procedures.

Valet Parking

There is a valet parking service at the main entrance to the hospital. Valets will park your car weekdays from 7:30 a.m. to 5:30 p.m. The cost for valet parking is the same as parking in the Triangle Garage.



Questions?

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

- For general questions weekdays from 8 a.m. to 5 p.m., call the Heart Institute at UWMC, 206.598.4300.
- For questions related to your procedure, weekdays from 6:30 a.m. to 8 p.m., call Cardiac Procedures at 206.598.7146. Ask to talk with a nurse.
- For urgent concerns related to your procedure, or if it is after hours or on a weekend or holiday, call 206.598.6190 and ask to page the Cardiology I Fellow on call.