Angiography: Chest Port

What to expect when you have a port-a-cath

This handout explains what a chest port is and what to expect when you have one.

What is a chest port?

Your doctor has asked us to insert a chest port (port-a-cath) in your body. This device is a catheter (long plastic tube) that is connected to a plastic and metal reservoir (see the picture below).

An interventional radiologist will place the port in your chest. This provider is a doctor or a physician assistant with special training in doing this kind of procedure.

When the catheter is placed in your chest, the catheter tip will be in the large vein that empties into your heart. The port itself will be under the skin of your chest, below your collarbone and above your breast area.

You will have a thin scar 1 to 2 inches long on your skin. You will not be able to see the port and catheter. But, you may have a small bulge in your skin where the port is.

A chest port reservoir and catheter
**Why do I need a chest port?**

Ports are very useful for giving medicines directly into a vein over a long period. They are better than an *intravenous* (IV) line because:

- A port can stay in place for months or even years, if needed.
- Certain drugs cannot be given through a standard IV, but they can be given through a port.
- Ports have a lower risk of infection over time than IVs, or other devices that stick out through the skin.
- You will not need needle sticks to get blood samples or to access your blood for treatments. These things can be done through the port.

It will take about 10 to 14 days for you to heal after the port is placed. But, after that time, having the port will not restrict your activities at all.

**How are ports used?**

Ports are accessed by using a special needle through the skin that covers the port reservoir (see the drawing on page 3). The port lets your care team:

- Give you drugs, such as antibiotics or chemotherapy, or blood products
- Remove blood samples for testing in the lab
How the needle gets to the port through your skin

Are there any risks from getting a port?
As with all medical procedures, there are some risks. The most common problems after placing a port are:

- **Bleeding:** Bleeding is usually minor and does not last long.
- **Infection right after the port is placed:** There is a small risk of infection right after the port is placed.
- **Infection more than 1 week after the port is placed:** This infection is more common. It is not related to the port placement procedure.
- **The port may not work correctly.**

There are other less common risks. Your doctor will talk with you about these risks before your procedure. Please make sure to ask any questions you have, so that you know what to expect.

Will I be able to do my usual activities?
For about 1 week after your port is placed:

- Avoid strenuous activities that put pressure on or stretch your neck and chest areas.
- Do not get the area wet (see “When You Get Home” on pages 7 and 8).

After 1 week, you may resume all of your usual activities.
Can the port be removed?
Yes. We will remove the port:

- When you no longer need it.
- If the catheter does not work right, cannot be fixed easily, and needs to be replaced. This happens very rarely.
- If you get a serious infection at the port site, catheter site, or in your bloodstream.

Before Your Procedure

- **Blood tests.** You most likely will need to have some blood tests done within 30 days of your procedure. Sometimes, we do this when you arrive for your appointment. We will let you know if we need a blood sample before that day.

- **Arrival time.** If you are an *outpatient* (not staying in the hospital), a Radiology nurse will call you the afternoon before your procedure. If your procedure is on a Monday, the nurse will call you the Friday before. The nurse will:
  - Tell you when to arrive at the hospital
  - Give you reminders about what to do on the morning of your procedure
  - Answer any questions you have

- **Interpreter services.** If you do not understand English well enough to understand these instructions or the details of the procedure, tell us right away. We will arrange for a hospital interpreter to help you. **A family member or friend may not interpret for you.**

- **Blood-thinning medicines.** If you take any blood thinners such as Coumadin, Lovenox, or Plavix, you may need to stop taking the medicine from 24 hours up to 10 days before the procedure, depending on which medicine you are taking. The Radiology nurse will give you instructions if you have not already received them

  **IMPORTANT:** If you have ever had a heart stent, a prosthetic heart valve, a pulmonary embolism, or have atrial fibrillation with a history of a stroke, please contact the provider who prescribed your blood-thinning medicine. Tell this provider that you are having a chest port placed. Your provider may need to change or stop your blood-thinning medicine.

- **Changes to diabetes medicines.** If you have diabetes and take insulin or metformin (Glucophage), we will give you instructions about holding or adjusting your dose for the day your port is placed.
Sedation

When the port is placed, you may receive sedative (medicine to help you relax) through your IV. You will stay awake, but feel sleepy. This is called conscious sedation. You will be sleepy for a while after the procedure.

Conscious sedation may not a safe option for you if you have certain health conditions. Tell us right away if you:

- Have needed anesthesia (medicine to make you sleep) for basic procedures in the past
- Have sleep apnea or chronic breathing problems (you might use a CPAP or BiPAP device while sleeping)
- Use high doses of narcotic painkiller
- Have severe heart, lung, or kidney disease
- Cannot lie flat for at least 1 hour because of back or breathing problems
- Find it hard to lie still during medical procedures
- Weigh more than 300 pounds (136 kilograms)

If you have any of the above conditions, talk with the providers in Radiology about the type of sedation that will be used for your procedure. You may receive:

- Only a local anesthetic (numbing medicine), such as lidocaine
- A local anesthetic and a single pain or anxiety medicine (this is called minimal sedation)
- General anesthesia (medicine to make you sleep), given by an anesthesiologist

Day Before Your Procedure

- The day before your procedure, you may eat as usual.
- Make plans for a responsible adult to take you home after your procedure and stay with you the rest of the day. You may NOT drive yourself home or take a bus, taxi, or shuttle by yourself.

Procedure Day

At Home

- Take your usual medicines on the day of the procedure, unless the doctor or a nurse tells you to hold them.
- Starting 6 hours before your procedure, stop eating solid foods. You may only have clear liquids (liquids you can see through), such as water, broth, cranberry juice, or weak tea.
• Starting **2 hours** before your procedure, take **nothing** by mouth.
  - If you must take medicines, take them with **only** a sip of water.
  - Do **not** take vitamins or other supplements. They can upset an empty stomach.

• Bring with you a list of all the medicines you take.

• Plan to spend most of the day in the hospital. If there is a delay in getting your procedure started, it is usually because we need to treat other people with unexpected and urgent problems. Thank you for your patience if this occurs.

**At the Hospital**

• Check in at Admitting on the 3rd floor (main level) of the hospital. Admitting is just off the lobby, to the right and behind the Information Desk.

• You may have also been given instructions to go to **Outpatient lab** for a blood draw. The outpatient lab is behind the Cascade elevators, next to Outpatient pharmacy. You can go to the lab either before or after you check in at Admitting.

• After checking in and having your blood drawn, take the Pacific elevators to the 2nd floor. Check in at the Radiology reception desk.

• A staff member will:
  - Take you to a pre-procedure area
  - Give you a hospital gown to put on
  - Give you a bag for your belongings

• While you are in the pre-procedure area:
  - Your family or a friend can be with you.
  - A nurse will ask you some health questions, take your vital signs (such as heart rate), place an **intravenous** (IV) tube in your arm, and go over what to expect.
  - A radiologist or physician assistant will talk with you about the procedure. They will ask you to sign a consent form, if you have not already done so.
  - You will be able to ask any questions you have.
  - You may want to use the bathroom at this time.
Your Procedure

- The nurse will take you to the Radiology suite. This nurse will be with you for the entire procedure.
- You will lie on a flat exam table. We will help you get into position.
- We will use monitoring devices to help us watch your vital signs during the procedure. These will include:
  - Wires on your chest to monitor your heart
  - A cuff around your arm to check your blood pressure
  - Prongs in your nose will give you oxygen and a probe on one of your fingers will show us how well you are breathing the oxygen
- We usually place the port on the right side of the chest. Please tell us if we need to avoid this side for any reason, such as having had a mastectomy, lymph node dissection, radiation therapy, wound, or infection.
- We will take ultrasound images of your neck and upper chest area. Ultrasound uses sound waves to create images of the inside of the body. This exam will show us if the blood vessels that we need to use are open. If there is any reason we cannot place the catheter, we will talk with you about other options. This is very rare.
- Next, the entire medical team will ask you to confirm your name and your allergies. They will then talk about the procedure that will be done. This review is done for your safety. It is done before every procedure.
- Next, a radiology technologist will use a special soap to clean the skin around your neck and chest. The technologist may need to shave some hair in the area where the doctor will be working.
- If you are able to receive conscious sedation, the nurse will begin giving the sedative. This will make you feel drowsy and relaxed.
- The technologist will place drapes around the area that has been cleaned. The drapes will cover part of the side of your face and create a tent over your head. You will be able to look out through an opening on one side.
- The doctor will inject a local anesthetic near the base of your neck and on your upper chest. You will feel a sting for about 10 to 15 seconds. After that, the area will be numb and you should feel pressure, but no sharp pain. Please tell us right away if you can feel pain. We can give you more anesthetic, if needed.
• A 2-inch incision will be made below your collarbone. The port will sit under your skin and be fully hidden. The catheter will run through your chest tissue, into a vein in your neck, and down toward your heart.

• Your chest incision will be closed with sutures (stitches) that will dissolve over time. They will not need to be removed later. The very small nick at the base of your neck will be closed with special glue.

• The procedure takes about 45 to 60 minutes. After the procedure, a sterile dressing (bandage) will be placed over your chest incision.

After Your Procedure

• You will be observed for a short time in Radiology. Then you will go to a recovery floor for about 1 to 2 hours until the sedation wears off. You will be able to eat and drink, and your family may visit you.

• When you are fully awake and are able to eat, use the restroom, and walk, you will be able to go home.

• It is rare to have problems with this procedure. If problems occur, we may need to keep you in the hospital so that we can keep watching you or treat you.

• Before you leave the hospital, your nurse will tell you what activities you can do, how to take care of your incision, and other important instructions.

When You Get Home

• Relax at home for the rest of the day. Make sure you have a family member, friend, or caregiver to help you.

• You may feel sleepy or have some short-term memory loss. This can last for up to 24 hours.

• For 24 hours, do not:
  - Drive a car or use machinery
  - Drink alcohol
  - Make important decisions or sign legal documents
  - Be responsible for the care of another person

• For 3 days, do not lift anything heavier than 5 to 10 pounds (a gallon of milk weighs almost 9 pounds).

• Do not shower or bathe until your dressing has been changed for the first time. This will happen at your teaching session, about 24 hours after your procedure.
If you **must** shower before your teaching session:
- Cover your bandages with plastic wrap and tape the edges of the plastic to keep your bandages dry.
- Try to keep the water from hitting your bandages.
- Gently pat dry.

Your stitches will dissolve. They do not need to be removed.

Let the white tapes (Steri-Strips) fall off on their own. This will take a week or more.

Do **not** scrub the glue that may cover your incision.

You may have some mild bruising, swelling, or tenderness over your chest and neck for 3 to 5 days. For pain relief, you may take acetaminophen (Tylenol) or ibuprofen (Advil, Motrin).

Resume taking your usual medicines as soon as you start to eat. Take **only** the medicines that your doctors prescribed or approved.

**When to Call**

Call us **right away** if you have:

- Severe bleeding or any bleeding that does not stop after you have applied gentle pressure for about 15 minutes
- Drainage from your incision
- Fever higher than 101°F (38.3°C) or chills
- Shortness of breath that is getting worse
- New chest pain
- Dizziness
- Vomiting

**Who to Call**

Patient Care Coordinator .......................................................... 206.598.6209

After hours (between 5 p.m. and 7 a.m.), and on weekends and holidays: 
*Ask for the Interventional Radiology Fellow on call* .......... 206.598.6190

**If You Have an Emergency**

Go to the nearest Emergency Room or call **911 right away**. Do not wait to contact one of our staff.