Catheterization Procedure

What is a cardiac catheterization?

Many people want to know what actually happens during a cardiac catheterization. Catheters are thin, hollow, plastic tubes. We move these catheters through the arteries and veins in the body to get to the heart. To get into the arteries and veins, we will typically enter the vessel with a needle in the upper leg creating an access site. Depending on the exact anatomy, sometimes we make the access sites in the arms, neck or, rarely, in the side through the liver.

Once the catheters are in the heart, we measure pressures and oxygen levels in the different parts or chambers of the heart. We also inject a dye called contrast, which lights up the heart structures on x-ray. Depending on the reason for the catheterization, we will then perform interventions. This may include closing holes, opening narrowings or a variety of other procedures. Once we are done, we remove the catheters and hold pressure on the access sites until any bleeding stops. The procedure can take anywhere from 2½ to 6 hours. We will try to give you the most realistic time estimate before the procedure starts.
What will happen before the cardiac catheterization?

One week before the procedure:
- You will receive a call from one of the nurse practitioners (NP) approximately one week before the scheduled procedure. During that phone call the NP will review the health history, medications, and any recent illnesses or infections. Also, the NP will discuss arrival times and any testing that may be performed.
- Your child should continue to take regularly prescribed medications unless otherwise directed by the NP.

One day before the procedure:
Please inform the NP at (734) 764-5176 if you, your child, or close contacts have been ill or have infectious symptoms such as:
- Fever (temperatures greater than 100 degrees)
- Severe cold or flu symptoms
- Wheezing
- Exposures such as chicken pox
- Croup, bronchitis, pneumonia
- Infections such as ear infections, pink eye, strep throat
- Any other symptoms or behaviors that seem abnormal for your child

For your child’s safety, the procedure may need to be postponed until your child has received medical treatment or recovered from the illness.

Some patients require testing the day before the scheduled cardiac catheterization. Tests may include x-rays, electrocardiogram (ECG), echocardiogram (ultrasound of the heart) and blood draw. Also, you may meet your interventional cardiologist to review tests and procedural consent, or you may talk with a member of our anesthesia team. This process may take most of the day, so you might want to pack healthy snacks and drinks for the day (unless otherwise directed by the NP). Your child should take a bath or shower the night before the catheterization because they may not be able to shower or bathe for a few days after the procedure.

Please remove all nail polish and body jewelry before the procedure. The NP will give you instructions about when to stop eating and drinking prior to the catheterization and what time to arrive the day of the procedure.

What should I expect on the day of the catheterization?
- You will be asked to arrive ½ to 1 hour prior to the procedure.
- To help your child feel more comfortable, have him or her wear comfortable and loose clothing, such as pajamas or sweatpants as they will have a bandage in the groin area.
- Talk about and bring their comfort items such as blankets, stuffed animals or pacifier.
- Pack items that may help keep them occupied after the procedure. That might include tablets, coloring supplies, books or crafts.
- Prior to the procedure you will be seen by the NP and interventional cardiologist (the doctor who will perform the catheterization). If you have not already signed the informed consent papers for the procedure, it will be done at that time.
- Testing such as lab work, x-ray or ECG may be required if it was not already done. After these preparations are finished, a nurse or technician will bring your child to the prep area where you will meet a member of our anesthesia team. That team member will discuss the type of anesthesia that will be given for the procedure. To help reduce nervousness, a medication may be given.
- The catheterization procedure can take anywhere from 2½ to 6 hours depending on what procedure is performed. You will be given a more realistic time frame the day of the procedure.
- You or your family will be given updates by the NP during the procedure.
- After the procedure is completed, the cardiologist will discuss the results with you and your family.

Where can I wait during the procedure?
- During the procedure, you may stay in the waiting room or request a pager from the person at the waiting room desk and leave the 11th floor.
- Wireless internet access is available.
- Please refrain from eating or drinking in our waiting area as a courtesy to patients waiting for their procedures who may not be allowed to eat or drink.

What should I expect after the procedure?
- It is necessary to lie flat for 4–6 hours after the procedure. Some of this time your child will be asleep due to the anesthesia from the procedure. As soon as your child is awake and able to tolerate drinking water, he or she will be able to eat.
- Depending on the procedures performed during the catheterization, your child may be required to spend the night in the hospital, with additional testing performed the following day.
- On the following day, the NP will review any testing that was performed and discuss post-procedural restrictions, and then your child will be discharged.
- Your child will need to rest and “take it easy” for a day or so after the catheterization, which may require additional days off of school or work. If any letters are required for school or work, please let the NP or social worker know.