Cardiac Catheterization

Your child has been scheduled for a cardiac catheterization in the Cardiovascular Lab at Children's Mercy Hospital at 2401 Gillham Road in Kansas City, Missouri. This is a test which allows the cardiologist to learn more about how your child's heart works. A catheterization is done after x-rays, electrocardiograms (EKG or ECG), echocardiograms (ultrasound wave tests), and physical examination have shown that a definite heart problem exists, and more information is needed. A cardiac catheterization can often be the only test that provides enough information to determine treatment.

Your child will be given anesthesia during this procedure. Once your child is asleep, a thin, hollow, flexible tube called a "catheter" is passed through the skin (with the help of a needle) into a vein or artery. Sometimes both an artery and a vein are needed to be catheterized. Incisions, staples, or stitches are usually not needed for this procedure.

Once the catheter has been inserted into the artery or vein, the cardiologist uses fluoroscopy (similar to an x-ray) to guide the catheter into different areas of the heart. While the catheter is in the heart, blood pressures are recorded in different heart chambers and blood vessels. Then dye is injected through the catheter and film x-ray "movies" called angiograms are taken. These movies allow the cardiologist to see the dye move through the inside of the heart.

To prevent infection, the catheterization is treated as a surgical procedure. The doctor wears a sterile gown and gloves. Your child is covered with sterile sheets, and the site is cleansed with antiseptic solutions.

During the procedure, you will be informed by one of our CV Lab nurses about how the catheterization is progressing.

The length of the procedure varies from 2-3 hours. After the procedure, your child will be monitored in the PACU (Post Anesthesia Care Unit) for about 1 hour. The cardiologist will review the findings with you. Every Friday, the cardiologists and surgeons meet and may review the results of your child's catheterization. (Not every child's catheterization is discussed with the surgeons.)

Risks

Cardiac catheterization involves some risks. The risks of this procedure are very low and each risk will be explained before the procedure by the cardiologist. These include: loss of circulation to a leg, blood clots (which could result in a stroke), bleeding, infection, perforation through a blood vessel or heart wall, irregular heart beats, and even death. However, the knowledge gained from the procedure is important enough to warrant risks.

Catheterizations are done routinely and safely. Patients range in age from a few hours old to adulthood. No child is too small or too sick to have this test, but the risks are higher in small and very ill children.

Anesthesia

Your child’s procedure will be done under general anesthesia. You will meet with an anesthesiologist prior to the procedure to discuss how your child will go to sleep and how his care will be managed during the procedure.
Medications

If your child is scheduled to have his procedure in the morning (arrival at the hospital before 8:00 am), do not give his morning medication without first checking with the CV Lab nurse. If your child’s procedure is scheduled for late morning or afternoon (arrival time after 8:30 am), you can give your child his morning medication.

Body Care

The night before the procedure your child should bathe or shower. For teenagers, both groin areas (the area where the hip and leg meet) will need to be shaved, as will the upper thighs. You may do this the night before or we will do this at the time of the procedure. Also, your child should not wear any jewelry, make-up, lotion or nail polish.

Special Instructions

- Your child cannot have anything to eat or drink before the test. (See letter for more information and times.) Broth, hard candy, milk and formula are all considered solids.

- If your child has had a fever, cold, flu, a contagious disease, or if he has been exposed to one during the week prior to admission, you should check with the CV lab at (816) 234-3256 before coming to the hospital.

- It may or may not be necessary for your child to spend the night in the hospital after the procedure. Please come prepared in case they do. We will try to let you know, either way, when he is being scheduled, but changes are always a possibility. It is encouraged that a parent stays in the room with the child overnight. A twin bed is available for parents in most rooms in the hospital.

- You may want to bring some of his personal belongings (such as a favorite toy, radio, book, pajamas or other comfortable clothing.) These personal belongings are often reassuring and help your child feel more secure because they are everyday reminders of home.

- If your family lives more than 35 miles from Children's Mercy Hospital, you can make arrangements to be placed on the waiting list to stay at the Ronald McDonald House, which is within walking distance of the hospital. To arrange for the Ronald McDonald House, or to get local motel information, please contact your social worker at least one week before the procedure at (816) 234-3670.

After the Test

To allow healing at the catheter insertion site, your child's cardiologist will order no weight bearing for 3-6 hours after the procedure. You may hold your child, he may sit up in bed, or lay on his sides, but he is not allowed to walk during this time. To prevent nausea and vomiting, he will be started on sips of clear liquids before progressing to his normal diet. Your child will return with a large dressing over the catheter insertion site. The dressing will be taken off before going home and a Band-Aid applied.

Discharge from the Hospital

Your child may resume normal activities and diet. Keep the Band-Aid in place for 1-2 days. Keep the puncture or incision site clean and dry. Report any fever and redness, swelling, drainage, or increased pain at the incision area to the doctor. Puncture sites at the groin will be completely sealed in 2-3 days and tub baths may be resumed, as long as the site is healed.