



## Cardiac Computerized Tomography (CT)

### *Our Mission*

Nicklaus Children's Hospital's mission is to inspire hope and promote lifelong health by providing the best care to every child. The hospital focuses on family-centered care in order to provide an optimal experience for patients and their families. We believe that parents and guardians play a vital role in the success of this test and want you to have an active role in your child's healthcare. The following information is to help prepare both you and your child for this scheduled exam.

### **What is a Cardiac CT Scan?**

- A Computerized Tomography (CT) scan takes detailed pictures of the inside of the organs, tissues, blood and vessels that cannot be seen on regular X-rays.
- It is often used to diagnose, monitor and treat certain conditions.
- *Nicklaus Children's hospital's CT scanner uses a low dose of radiation.*
- *Women who are pregnant and any accompanying children are not permitted to be in the room during the scan. If you are pregnant, please bring another adult who can stay with your child during the scan and/or another adult who can wait in the waiting room with the other children*
- *CT scans are not painful.* The bed moves slowly through the tunnel and the camera remains around your child, never touching him/her. A lot of children say the camera looks like a spaceship or doughnut!
- A CT scan takes approximately 10 to 15 minutes depending on the type of scan.
- In order to get the best results, it is very important that your child *holds still* for the scan.
- *In certain cases*, patients may be given a mild oral sedative to relieve anxiety and help hold still. Patients who need stronger sedation (typically children younger than six to eight years-old and some older children with developmental delays) will be re-scheduled for a future scan under general anesthesia.

### **What to Expect the Day of the Exam**

#### **Step 1: Getting Ready**

- From the Radiology Department waiting room, you and your child will be brought to an exam room where you will be seen by a nurse who will take your child's vital signs and ask general questions about your child's health.
- *Please feel free to bring your child's favorite toy or activity to provide distraction while in the exam room.*
- Some CT scans may be ordered with "contrast" which is a special water-like substance that helps make the pictures more clear and detailed.
- This particular contrast is given through an IV catheter.
  - **IV contrast** is administered by placing a small, plastic straw in the vein (usually the hand or arm).
  - *Numbing medication may be used to help your child feel as comfortable as possible during the IV placement.*
- The nurse will place the IV, if needed, in the exam room prior to your child's CT scan.



## Cardiac Computerized Tomography (CT)

### **Step 2: Taking Pictures**

- From the exam room, a member of the team will help take you and your child to the CT room.
- A maximum of two caregivers may go to the CT room with the patient. All other children must be supervised in the waiting room by another adult.
- If you are staying in the CT scanner room during the scan, a technologist will provide you with a lead vest to wear while in the room.
- Once in the room, you will see a long table attached to a circular camera. Some children say the CT scanner looks like a big donut or spaceship!
- To help your child stay secure and still during the scan, the technologist will place a velcro strap across your child's waist.
- The table will then move through the tunnel part of the scanner until the part of the body that is being scanned is under the camera.
- A staff member will be able to speak to you and hear you through an intercom system in the room.
- During the scan, staff members will be in the control room connected to the CT scanner room talking to your child throughout the scan providing instructions on how to hold his/her breath throughout the pictures, *if needed*.

### **Step 3: Results**

- Please contact your doctor after the scan.

### ***Child Life Specialists***

A part of the Child Life Specialist's role in the Radiology Department is to help children and families cope with the anxiety and fear associated with medical procedures. A Child Life Specialist may be available on the day of the exam to provide education and coping strategies. For more information, please contact Nicklaus Children's Hospital's Children's Experiences Department at 305-666-6511 extension 4875 and select #1.