

What do you know about Pediatric cardiac catheterization?

Dear father & dear mother, Welcome to King
Salman Cardiac Center! We are pleased to inform you
that the following procedures will be done before
cardiac catheterization:

 The patient will be evaluated by the physician to assess his/her fitness for cardiac catheterization, including history of the illness and clinical examination.



2) An electrocardiogram (ECG) as well as chest X-ray will be requested.



3) Next will be an echocardiographic evaluation in the Echo. Room.



4) Following assessment by the consultant cardiologist, the patient will be included in the catheter list the next day Consent for the procedure will be taken from the parent after full explanation of the cardiac lesion and the procedure.

5) On the day of cardiac catheterization, the patient will be transferred to the cath. Lab.

6) Upon finishing the procedure, the patient will be returned to the ward to allow observation for at least 12 hours.

7) The next day the patient will be discharged with the management plan and discharge summary as well as the medications





- * The watcher in our center is the mother and, it is not allowed for both parent to stay inside the room except in visiting hours (6:00 -9:00 pm, for ICU 4:00-6:00 pm).
- It is not permitted for children other than the patient to be admitted with the mother with the exception of breast feeder babies

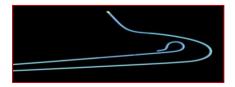
Cardiac catheterization:

the liver

✓ The catheter will pass to the right side of the heart (right atrium, right ventricle and pulmonary artery) through the large veins in the groin, neck, hand or sometimes



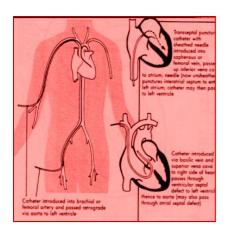
- ✓ Sometimes the catheter will pass to the left side of the heart (left atrium, left ventricle and aorta) via a
- ✓ Otherwise the artery in the femoral or axillary area can be used for left heart catheterization



defect between the atria



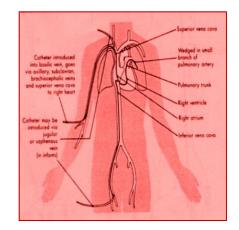
Different types of cardiac catheters

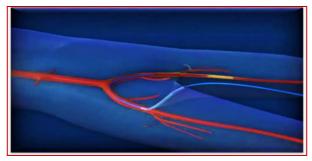


Different types of cardiac catheters

Left side catheterization

Right side catheterization





Cardiac catheterization from femoral vein/ artery

Types of Cardiac Catheterization:



A) Diagnostic Cardiac Catheterization used to:

- ✓ Measuring the oxygen and pressure in the ordinary situation and under stressful conditions
- ✓ Calculating the shunt through the defect, in addition to determining the degree of the narrowing at the cardiac valves
- ✓ Define the need for any intervention

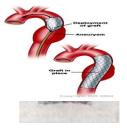


B) Therapeutic Cardiac Catheterization:

The name means a transcatheter treatment which include:

- ✓ Balloon dilatation of the narrowed vessels and valves
- ✓ Creation of an opening at the atrial (balloon atrial septestomy) or valve level
- ✓ Closure of any intra or extra cardiac defects
- ✓ Stent implantation for narrowed vessels





✓ Pulmonary or tricuspid valve insertion and removal of foreign object





ASD device closure

Pulmonary valve implantation





Post Cardiac Catheterization:

Upon completion of the procedure the patient will remain for at least an hour in the recovery area for observation and then returned to the ward, unless in a critical situation or after general anesthesia, in which the patient will be sent to ICU for close observation.

She / he will be discharged the next day with the management plan and discharge summary.

It is important that:

- ✓ Patient should not be mobilized for at least 8 hours to prevent bleeding from the puncture sites
- ✓ The pressure dressing should be kept in place until removed by the responsible nurse
- ✓ The patient should not receive any fluid or food per mouth until fully awake

✓ There is a possibility that a little pain will be felt around the puncture sites which will disappear with time



Complications:

- ✓ Local or generalized infection can occur.
- ✓ Absent pedal pulse can occur necessitating an infusion of heparin.
- ✓ Slight pain around the puncture sites, or sometimes in the back.
- ✓ Subcutaneous bleeding surrounding the puncture site, that will disappear rapidly.



