

ABOUT YOUR PROCEDURE

Electrophysiology Procedures



The information in this guide has been assembled to help you become a partner in your child's care. Your presence, participation and partnership are needed to deliver the best care possible for your loved one. You are the expert. You know your child better than anyone. We welcome your questions and insights, and we value you as a member of our health care team.

Electrophysiology Procedures

What is an electrophysiology (EP) study?

An EP study is a procedure in which a physician will examine the electrical signals inside your child's heart by placing special catheters (long skinny tubes) into the heart. The catheters are placed into the tops of the legs and reach the heart through the blood vessels. During the EP study, the physician will diagnose any abnormal heart rhythms and locate "short circuits" in your child's heart that are causing your abnormal heart rhythm. The procedure is typically done under general anesthesia.

What is an ablation?

Ablation is the process of creating a small scar on the inside of the heart to eliminate the "short circuits" that cause abnormal heart rhythms. Ablation is performed using a special catheter that produces radiofrequency energy (burning) or a cryoablation (freezing). The electrophysiologist will decide which of these is the best to treat your child's heart rhythm. Many abnormal heart rhythms can be cured with ablation.



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What are the risks of EP study and ablation?

Your electrophysiology team will go over these with you before the procedure. The most important complications are very rare, but include:

- Damage to the normal conduction system (very low risk with freezing catheter)
- Clot formation leading to stroke (risk limited by using medications to prevent clotting)
- Coronary artery injury
- Bleeding around the heart

What happens before electrophysiology procedures?

One week before the procedure:

An EP team member will call you before the procedure to review any required testing and instructions for the day. You will be given instructions on when to arrive, whether or not to hold medications, and when to stop eating.

If you have not been called five days before the procedure, please call the Pediatric Cardiology Coordinated Care Center at (734) 615-6031 and ask to speak with an EP team member.

Symptoms to report:

The following symptoms or illnesses should be reported to the EP team at (734) 764-5176 should they occur before or on your child's scheduled procedure date:

- Severe cold or flu symptoms
- Fever (temperature over 100 degrees)
- Wheezing
- Exposures (such as chicken pox)
- Croup, bronchitis, bronchiolitis or pneumonia
- Infections which may or may not already be under treatment (ear infection, pink eye, strep throat, sinusitis, etc.)

The procedure may need to be postponed until your child has received medical treatment or recovered from the illness.

Instructions for the day before the procedure:

- Shower or bathe your child the night before (your child may not be able to take a bath for a few days after the procedure).
- Contact lenses, jewelry, nail polish, make-up, and tampons should not be worn the day of the procedure.
- Hair beads and braids may need to be removed before the procedure.
- Do not apply lotion to your child's skin prior to the procedure.
- NO eating or drinking after midnight the night before the procedure, unless you have received other specific instructions.
- Follow the medication instructions given to you by the EP team.

The day of your child's procedure:

- Dress your child in loose comfortable clothing.
- Your child may bring a favorite stuffed animal, blanket, toy or movie.
- Be prepared to be at the hospital for the entire day — bring books, work or hand-held games to pass the time during the procedure.

After check-in:

- The EP team will evaluate your child.
- The doctors will explain the procedure to you, obtain your consent for the procedure, and answer any remaining questions you have.
- The anesthesia team will also evaluate your child and answer any questions.
- You may wait in the waiting room during the procedure or request a pager from the waiting room desk and leave the 11th floor.
- Wireless access is available.
- Please refrain from eating or drinking in our waiting area; some patients are waiting to have procedures and are not allowed to eat or drink.

What happens after the EP study or ablation?

Once the procedure is over, all catheters are removed. No stitches are needed. After your child wakes up, he or she will be taken to the recovery room. Your child will have a large bandage across the top of the leg that will most often be removed before discharge. **Your child will need to lie flat on his or her back for up to four hours after the procedure to allow the catheter access sites on the legs to heal.** Rarely, patients need to spend the night in the hospital; most can go home the same day.

Common complications include:

- Minor bruising at the top of the legs where the catheters enter
- Sore spots from lying down for the procedure for many hours
- Nausea and vomiting after anesthesia

You should limit your child's activity for the day after the procedure. Your child can take a shower the next day but should avoid submersion in water like in a pool, hot tub or bath for a couple of days.