

Cardiac Electrophysiology Study (EPS)

What is a Cardiac Electrophysiology Study (EPS)?

A cardiac electrophysiology study is a specialized study that allows your cardiologist to study the electrical activity of the heart that helps to identify:

- Disturbance to your heart rhythm
- The cause of this disturbance
- The best treatment method

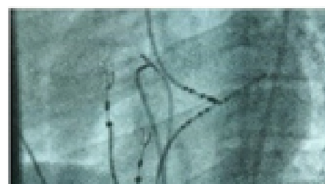
Why do I Need a Cardiac Electrophysiology Study?

Your doctor suspects or has determined that you have an arrhythmia or heart rhythm disturbance. When your heart beats abnormally fast or slow, you may experience one or more of the following symptoms:

- Dizziness or light-headedness
- Fainting spells
- Fatigue
- Palpitations (Heart beating faster and/or harder)
- Shortness of breath
- Chest Pain



Abnormal heart rhythm



X-ray guided catheter placement

What can I expect for the procedure?

Before the Procedure

Your doctor will discuss the goals, benefits and risks of the procedure with you. You will be admitted to the hospital on the day of the test, and will need to be warded for 1- 2 days. For women of childbearing age, a urine pregnancy test may be carried out.

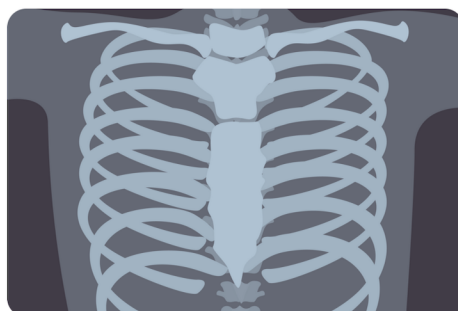
You will need to fast from midnight on the day before the test until after the procedure is completed.

The EPS is performed in the Invasive Cardiac Laboratory and may take about 1.5 to 2 hours.

If necessary, a plastic tube or cannula will be inserted into one of the veins on your hand to facilitate the injection of medications during the test. You will be given medication through the cannula on your hand to help you relax or sleep. For accurate test results, you will need to lie still throughout the study.

During the Procedure

After an injection of local anaesthetic, several wires will be inserted into the large blood vessels at the groin and placed into the heart under X-ray guidance. When the leads are placed at the desired locations in the heart, the specialist will record the electrical activities of your heart, as well as stimulate your heart with an electrical current to observe the response. You may experience feelings of your heart beating harder and faster during the test. If you experience any discomfort during the procedure, please inform the doctor.



During the study, the doctor will determine if any treatment is required. The most common form of treatment is known as radiofrequency ablation, which "burns" or ablates culprit tissues causing the abnormal heart rhythm. This is done by applying electric current through a catheter (or lead) to heat up and eliminate the culprit tissue.



After the Procedure

When the examination is completed, the wires will be removed and tiny wounds at the puncture sites will be compressed to stop any bleeding. These wounds should heal within 7-10 days.

This procedure is largely painless except during the initial injection of the local anaesthetic.

After the test, you will be asked to lie in bed for a few hours. Avoid excessive movement of the leg to prevent bleeding at the puncture sites. If you feel pain or swelling in the area, please inform your nurse. Painkillers will be prescribed if necessary. Usually, you will be able to go home the next day.

Inform your doctor if:

1. You have any drug allergies to X-ray contrast materials (commonly known as dye), heart rhythm medications and pain-relieving medications.
2. You are pregnant / possibly pregnant.

Contributed by Nursing

This brochure is produced for educational purposes and should not be used as a substitute for medical diagnosis or treatment. Please seek the advice of a qualified healthcare provider before starting any treatment or if you have any questions related to your health or medical condition.

Information shared is accurate as of April 2024 and subject to revision without prior notice.



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