

Electrophysiology Studies (EPS) & Ablation



Electrophysiology studies is a procedure that studies the electrical conduction of the heart and helps to assess abnormal rhythms and determine if there is a correlation between arrhythmias and the patient's symptoms such as dizziness, palpitations or blackouts.

An ablation is when an electrode is passed up to the heart and navigated to the specific area of the heart that creates an abnormal rhythm disturbance. Ablation applies cooling or heating energy via a specialized catheter to a small area of abnormally functioning tissue, causing a small areas of scar and rendering the area inactive. The scar tissue will impede future production of abnormal rhythm.

Why do I need an EPS & Ablation?

This test will help provide the doctor with information regarding your symptoms and if there are any electrical triggers from your heart rhythm or arrhythmia. The doctor will also gain important information about the electrical current of your heart and how it flows. The doctor will also be able to provoke an abnormal heart rhythm which will then be analyzed by the team.

Your doctor may or may not have ordered an ablation with your EPS. Ablation is considered the appropriate treatment for arrhythmias that are not well controlled with medication, or there is poor compliance with medications or lifestyle changes, or a desire to stop taking the medication that treats the arrhythmia.

How do I prepare for an EPS/ Ablation Procedure?

- The Cardiac Catheter Laboratory will ring you in the few days before the date of your EPS and discuss your medications and instructions for the day.
- You must have nothing to eat or drink for at least 6 hours prior to your procedure.
- You will be asked to bring all your medications with you
- If you are a diabetic, on the morning of your procedure, you will be asked not to take your morning insulin or diabetic tablets because you are fasting. You will be reviewed by a doctor on admission who will decide your diabetes management during the admission.
- Some medications interfere with this test so it is important to discuss your medications with us. You will be advised by your Cardiologist if there are medications that should be stopped. Your booking letter will confirm this.
- Your other usual medications can be continued as normal and may be taken with a sip of water, unless you are instructed to do otherwise
- If you have had a recent blood test, the CCL nurse may ask where you had these taken, so the doctor is aware of recent results, before the procedure.
- Organise an adult support person to drive you home from hospital, who you can stay with overnight.

What will I expect during the EPS/ Ablation?

Your procedure will be done in Cardiac Catheterization Laboratory. The team will prepare you with antiseptic skin wash and you will be covered with sterile drapes. The team will be in gowns and masks to ensure the sterility of the procedure. The doctor team will prepare the groin with some local anesthetic and then insert a small sheath into the large vein. This is where the very fine catheter is inserted through the sheath using x-ray to ensure the catheter is gently guided into place into your heart.

The catheter will assist the cardiologist to analyze your rhythm disturbance (arrhythmia) which will help diagnose and determine the treatment plan. You may be aware of your rhythm disturbance with palpitations, this should resolve once the testing has stopped. Although uncommon, the rhythm disturbance may need treatment to stop with medication or direct current cardio reversion (shock) under an anesthetic.

The information that is gathered from the EPS study will help identify the abnormal tissue that causes the rhythm disturbance. If you have been consented for an ablation and the doctor deems it safe to proceed, the ablation is then carried out and scar tissue is formed on the heart, blocking any abnormal conduction from this area.

The procedure itself takes about 2 hours and you will have some sedation and pain relief during this time to ensure you are comfortable.

Will I stay in hospital after the EPS/Ablation procedure?

Usually, patients are required to stay in hospital overnight. However, in some cases you may be able to go home on the same day. You may feel sleepy after the sedation. **Importantly**, you will not be able to drive for 48 hours post the procedure.

Things to expect after the procedure

After the procedure is finished the catheter and the sheath will be removed and firm pressure will be applied to your groin to ensure there is no bleeding. You will be instructed to rest in bed up to four hours following the procedure. The team will observe the puncture site regularly along with your blood pressure and heart rate. Once you have recovered you will be reviewed by a doctor and be able to go home. A follow up appointment will be made for 6-8 weeks and this will be mailed out to you soon after discharge.

The success rates of ablation procedure vary depending on the particular arrhythmia. Some patients may require future additional ablation procedures in some cases. Your cardiologist will provide you with more information about your particular arrhythmia and likelihood for successful ablation.

References:

- www.MonashHeart.org.au
- www.Heartfoundation.org.au
- www.bendigohealth.org.au

If you have a question about your appointment, you can call:

Cardiac Catheter Lab

5454 7010

