

## **ELECTROPHYSIOLOGY STUDIES (EPS)**

An electrophysiology study is used to evaluate serious heart rhythm abnormalities (arrhythmias) that are not controlled by medication. It may also be done to evaluate fainting that may be caused by arrhythmias, to assess the effectiveness of arrhythmia drugs and their dosages, and to provide information prior to surgery for inserting a pacemaker, or to correct an arrhythmia.

### **Procedure:**

- A small incision is made in the arm or in the groin
- Very small electrodes are then threaded through this incision into a vein and up into the heart
- These electrodes record the heart's electrical activity and may be used to stimulate heartbeat patterns that lead to serious arrhythmias.
- During such episodes, various drugs can be given to see whether or not they are effective at treating an arrhythmia.
- Radio-frequency ablation may be performed, which is a procedure in which an area that causes an arrhythmia is identified and eliminated.
- You will be given medication to keep you calm and sleepy during the procedure, so you will need someone to drive you home afterwards.

### **Risks:**

- Severe rhythm problems, which can usually be treated immediately
- Bleeding at the incision area or from the vein used to thread the electrodes to the heart
- Abnormal blood clot formation - some of these clots may travel to other body parts, leading to problems with the lungs or brain
- Infection at the incision site
- Injury to the heart
- The doctor who performs the procedure will discuss risks with you in more detail

*Reviewed by e-MDs staff 1/2016*