Ablation

Ablation treats the irregular rhythms of the heart. It stops or interrupts the abnormal electric path so that the normal electric path can be used for a normal heart rate.

When your heart beats, the beating comes from an internal electric signal. It is like a start button that gets pushed over and over again, at regular intervals. Sometimes, the electric signal doesn’t work as it should. The heart may get more or not enough “starts” than it needs, or the signal may not flow through the correct path as it should.

You may hear these terms used to describe your condition:

- Tachycardia (Tach-uh-car-dee-ah) is when the heart beats too fast.
- Bradycardia (Brady-car-dee-ah) is when the heart beats too slowly.
- Arrhythmia (ah-rhythm-me-ah) is when the heart does not beat at a normal rhythm.

Normal Electric System

Your heart beat normally starts above the upper chambers of the heart in a place called the SA node (SA means Sinoatrial node). The SA node is your heart’s natural pacemaker or “start button”. The electric signal goes through the upper chambers of the heart or the left and right atrium. It passes through an AV node which is the bridge between the upper chambers and ventricles. It then goes down through the lower chambers of the heart or the ventricles. Your heart contracts and then relaxes through the cycle then the process starts over again.
Reasons for Ablation Treatment

Ablation is one treatment your doctor may recommend to fix one or more electric problems with your heart:

- Problems from the SA node. The electric signal may be too slow or send too many electric signals. If sometimes there are not enough “starts” to the electric signal and other times there are too many “starts”, you may hear the term sick sinus syndrome or “tachy-brady syndrome”.

- Problems with the electric signal moving through the upper chambers of the heart, called the left and right atrium. The electrical signal may start in the atria instead of in the SA node. If there are abnormal signals coming from parts of the atria, you may hear the terms atrial flutter or atrial fibrillation.

- Problems with the electric signal moving from the atria to the lower chambers of the heart, called the ventricles. The signal may not pass through the AV node or the same signal may pass through the AV node more than one time. If this occurs, you may hear the term “AV node re-entry tachycardia”.

- Problems with the electrical signal moving through the lower chambers of the heart, called the left and right ventricles. The electrical signal may start in the ventricles instead of in the SA node. If there are abnormal signals coming from parts of the ventricles, you may hear the terms ventricular tachycardia or premature ventricular contractions (PVCs).

About the Procedure

The ablation procedure is done in a special laboratory by a doctor who specializes in heart rhythm problems called an electrophysiologist. Your groin area will be shaved and cleaned with a disinfectant soap. A medicine that numbs the tissue will be injected before the procedure starts. A thin and flexible tube, called a catheter is used.

You will feel pressure when the catheter is inserted. X-ray pictures and electrocardiogram (ECG) tracings of the heart are done until the catheter is in the right place. With the catheter in place, the doctor will be able get signals from inside your heart. The doctor will find the electric signal that is not normal, and the heart tissue will be ablated until the signal stops.

Depending on the type of abnormal electrical conductions, a pacemaker or defibrillator may be inserted. If a device is needed, then an incision about 2 to 3 inches will be made on the left or right side of your chest. You may feel discomfort, but not pain during the surgery.
After the Procedure
Your blood pressure, heart rate and incisions will be checked often. You will need to lie flat for 3 to 4 hours after the catheter is removed from your groin.

- You will not be able to eat until after the catheter has been removed. If you were given a blood thinner, there may be a delay in removing the catheter.
- If the catheter is removed from the groin area, a small sandbag may be placed to help the incision to heal and prevent bleeding. Do not remove this sandbag before it is safe to do so.
- If there is still bleeding from this area, manual pressure may be needed.
- You will not be able to eat until after the catheter has been removed. If you were given a blood thinner, there may be a delay in removing the catheter.
- If you received a pacemaker or defibrillator, an ice pack will be placed on the chest area to decrease pain and swelling.
- The morning after the procedure a device nurse will visit you to make sure your pacemaker or ICD is working well and to help you with care of your incisions.
- You may be given a prescription for the medicine esomeprazole (brand name Nexium) for the next 30 days to avoid signs of reflux and protect your esophagus after an ablation for Atrial Fibrillation.
- You will have a follow up appointment scheduled to check on your incisions.
- A heart monitor may be ordered to check on your heart rhythm several weeks after ablation.

Please ask your doctor or nurse if you have any questions or concerns about this procedure.

Talk to your doctor or others on your health care team if you have questions. You may request more written information from the Library for Health Information at (614) 293-3707 or email: health-info@osu.edu.