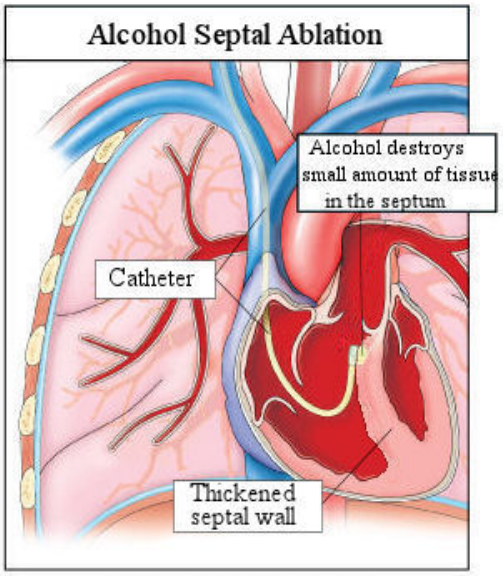
Alcohol Septal Ablation

Hypertrophic cardiomyopathy (HCM) is a condition in which the heart muscle becomes thickened. The thickening makes it harder for blood to leave the heart. The heart must work harder to pump blood and its valves may not work as well. Heart valves help control the direction of blood flow. The chambers in the heart are also smaller so they cannot fill with as much blood for pumping. Younger people are likely to have a more severe form of HCM, but the condition is seen in people of all ages.



© SEIF & ASSOCIATES, INC., 2006

There are 4 ways to treat hypertrophic cardiomyopathy:

- Medications.
- Pacemaker.
- Surgery.
- Alcohol septal ablation.

Until recently, surgery has been the customary way of treating HCM. Surgery involves an open heart operation. In this operation, the surgeon cuts into the heart and removes the area of overgrown heart muscle. Although complications are possible, this procedure produces good results.

More recently a new treatment called alcohol septal ablation has been developed. The specialized heart doctor who performs this procedure is called an interventional cardiologist. **This is a discussion about alcohol septal ablation as treatment.** Which patients are best served by surgery or alcohol septal ablation is still a subject of debate.

PROCEDURE

The procedure is done under sedation. First, a cardiac catheterization procedure is performed. This is done to know which coronary artery goes to the enlarged septum. Next, the artery that supplies the septum is blocked with a balloon and alcohol is injected into the artery. Your heart is constantly monitored. The alcohol is left in the artery for a few minutes. The balloon is then removed and follow-up pictures are taken. The alcohol causes death to a small area of the enlarged septum. This procedure essentially creates a heart attack in the area of the enlarged heart muscle. This may cause mild chest pain during the procedure. Over time, this dead tissue will be replaced by scar tissue. This scar tissue is thinner than the muscle of hypertrophic cardiomyopathy. This reduces the blockage of blood flow from the muscular chamber of your heart. You will begin to feel better almost immediately. Problems continue to improve over the next several weeks.

AFTER THE PROCEDURE

You are usually kept in the hospital for a few days following the procedure. This is done to monitor you. The most common side effect of this procedure is some form of heart block. This means the electrical system which travels in the septum gets injured. This can cause you to have a very slow heart rate. A temporary pacemaker is often placed to keep your heart rate normal. You are monitored in the ICU for several days after the procedure. If you have a complete heart block you will remain in the hospital until a permanent pacemaker can be put in. The chances of needing a permanent pacemaker is greater if you had problems with heart block before the procedure was done. If you have alcohol ablation, you must agree to have a pacemaker put in if needed.

You will begin to feel better almost immediately. You can expect to have less chest pain, less shortness of breath, less swelling and fluid retention, and better exercise tolerance. Problems usually improve over the next weeks and months. Medications often can be adjusted. There should be follow-up appointments with your

interventional cardiologist as well as your primary caregivers for the next several years. Echocardiograms will be used to evaluate the healing of the septum, the ability of your heart to pump more efficiently, and the functioning of the mitral valve. The mitral valve should be checked at three months after the procedure and then yearly.

RISKS & COMPLICATIONS OF THE PROCEDURE

Most patients have a successful procedure.

- In some patients the procedure is only partially successful and may need to be repeated. Patients who fail to respond to alcohol septal ablation may still be candidates for surgical treatment.
- The most common side effect of this procedure is a complete heart block. About 1 in 10 people may need a pacemaker if this complication happens.

Other potential complications of the procedure include:

- Heart attack.
- Irregular heart rhythms.
- Infection.
- Bleeding
- Allergic reaction to the x-ray dye.
- Kidney failure from the dye.
- Cardiac perforation.
- Need for emergency surgery.
- A failed or ineffective procedure.

All of these complications are uncommon.

FOLLOWING ALCOHOL SEPTAL ABLATION

SEEK IMMEDIATE MEDICAL CARE IF:

- You have severe chest pain, especially if the pain is crushing or pressure-like and spreads to the arms, back, neck, or jaw.
- You have sweating, shortness of breath, or feel sick to your stomach (*nausea*). **THIS IS AN EMERGENCY. Do not wait to see if the pain will go away. Get medical help at once. Call for local emergency medical help. DO NOT drive yourself to the hospital.**
- You notice increasing shortness of breath during rest, sleeping, or with activity which is unusual for you.
- You develop chest pain which is unusual for you.
- You develop sweating (*diaphoresis*) or nausea which is unusual for you.
- You are unable to sleep because you can not breathe.

Document Released: 10/14/2008 Document Re-Released: 09/26/2009
ExitCare® Patient Information ©2011 ExitCare, LLC.