

## Valvuloplasty

A valvuloplasty is a procedure to open a stiff (stenotic) heart valve. This *Health Fact for You* will explain the procedure and what to expect.

### Valvuloplasty

This procedure uses a thin flexible tube (catheter) inserted through an artery or vein in your groin. The thin flexible tube is placed in the stiff heart valve. The balloon on the end of the thin flexible tube is inflated until the heart valve leaflets are opened. Dye is used to see the heart valve and tube on x-ray. An x-ray films the heart valve and chamber as they pump blood. These x-rays can be viewed right away. **Tell your doctor or nurse if you are allergic to x-ray dye (contrast).**

### How Your Heart Works

Your heart is made up of strong muscle tissue. Your heart has four chambers, two on the right side (venous) and two on the left side (arterial). The upper chambers are called the right and left atrium. The lower chambers on each side are called left and right ventricles. All four chambers work together to pump the blood and send nutrients and oxygen to your body.

The main pumping chamber is the left ventricle. This chamber pumps blood with oxygen to all parts of your body. The right ventricle pumps blood to your lungs where it picks up fresh oxygen.

There are 4 valves in your heart. They are between the chambers and make your blood move in only one direction.

- Mitral valve is between the left atrium and the left ventricle.
- Tricuspid valve is between the right atrium and the right ventricle.

- Pulmonary valve is between the right ventricle and the pulmonary artery (goes to lungs).
- Aortic valve is between the left ventricle and the aorta (main artery in the body).

### Before the Procedure

A nurse will call you a few days before to tell you how to prepare for the procedure and what time to arrive.

### The Day of the Procedure

- Take your medicine as instructed. You may have been asked not to take some medicines before the test.
- **Bring** a list of your medicines, inhalers, over the counter medicines and supplements.
- If you use a CPAP or BiPAP machine, bring it with you along with the hoses and mask.

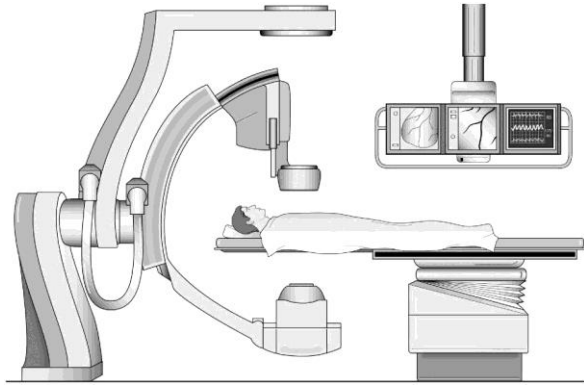
Please arrive to the procedure area at the time you were instructed. Let us know if you do not want family or friends to be present when the nurse or doctor meets with you.

You will change into a gown. You may want to wear anti-slip socks. The room is kept very cool. Remove watches, earrings, necklaces, or medic alert bracelets. You may wear glasses and hearing aids. If you wear contact lenses, please bring your solution and case for storage to remove during procedure.

### In the Lab

It will be cool in the lab. You will be helped onto the table. You will lie flat so that the x-ray machine can rotate around the upper part of your body. If you have back problems, tell the staff so that they can help you find a

more comfortable position. Patches will be placed on your upper body. These patches are hooked to machines that show your heartbeat.



### Procedure Site

Your groin will be used for the procedure. The area will be shaved and cleaned.

You will be covered from your chest to feet with a sterile sheet. Once the sheet is placed over you, keep your arms at your side. If you need to move your arms, ask the nurse to guide you.

### The Procedure

Your doctor will inject a small amount of medicine into your groin. It will burn a little but will quickly numb the area. Your leg may feel numb as well.

You will be given medicine for pain and to make you sleepy. You will be sleepy but able to talk with your doctor and nurse.

After numbing the site, the doctor will insert a small needle and small tube (called a sheath) in the artery or vein in your leg. A thin flexible tube is passed through the tube up to your heart valve. You will feel pressure, pulling, and tugging at the site where the tube is inserted.

During the procedure, your doctor may ask you to take a deep breath, hold your breath, or breathe normally.

For deep breaths, breathe in slowly, as if sucking through a straw. No short, jerky breaths. Hold the breath until we tell you to breathe normally. A deep breath helps us see your heart better. When asked to breathe normally again, **gently** let your breath out so that the catheters remain in place.

### After the Procedure

The doctor will remove the catheters and tubes. They will hold pressure on the site or use a device to stop any bleeding. You will return to a room to recover. Your nurse will tell you when it is safe to get out of bed.

The nurse will keep you comfortable. They will check your vital signs and site for bleeding. Tell your nurse if you have any pain in your body or at the site.

Some patients go home the same day, and some stay overnight. You will be told this after the procedure. If you can go home, you will need a responsible adult to drive you home. You should not drive, make important decisions, or drink alcohol until 24 hours after the procedure.

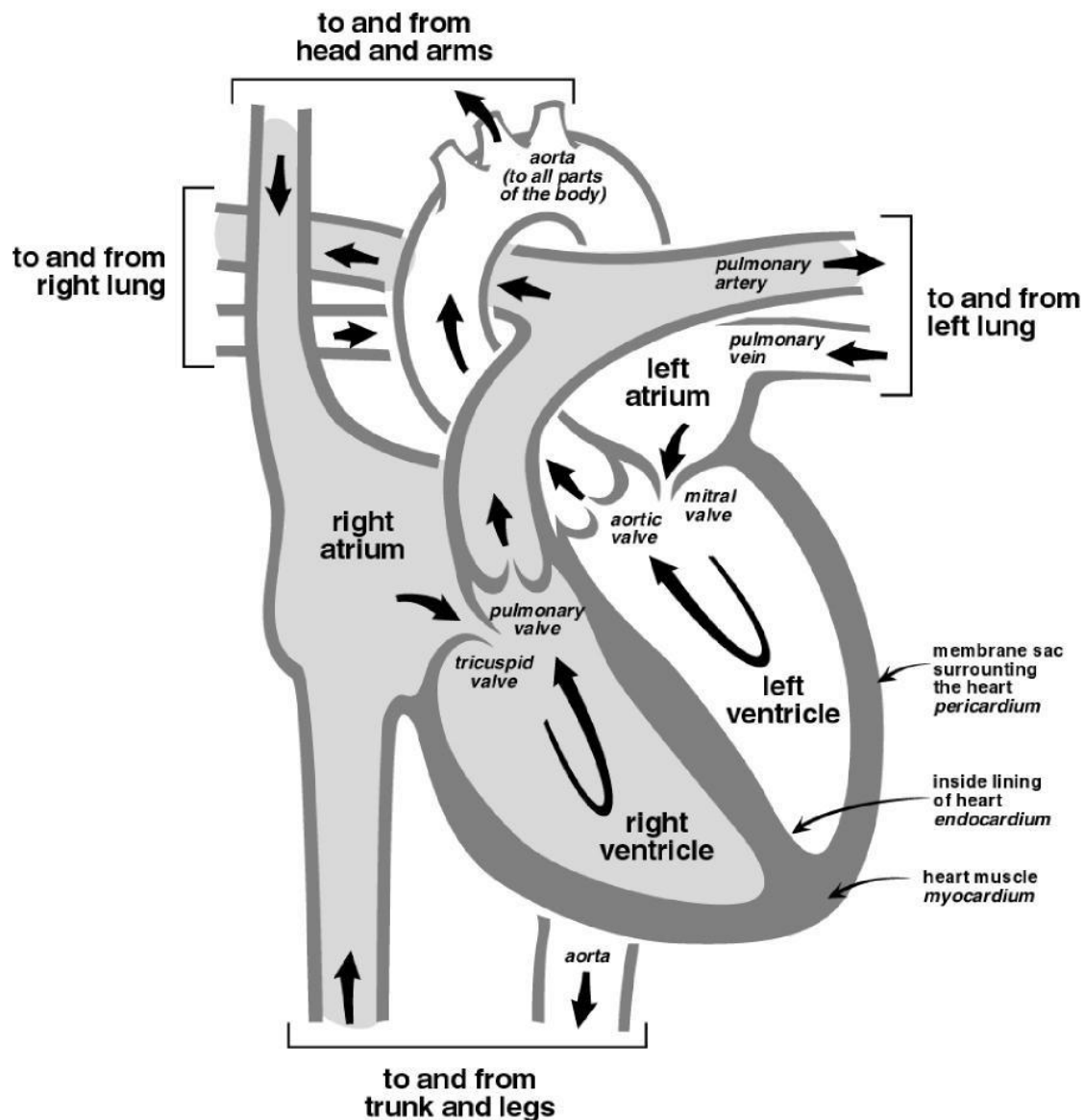
Any treatment for your heart depends on the type of heart problem that you have. Do **not** stop your heart medicines without first talking with your heart doctor (cardiologist).

### When to Call

Call your doctor right away if you have:

- Chest, arm, neck jaw, back and belly pain
- Shortness of breath
- Nausea or vomiting
- Heavy sweating

# The Heart and How it Works



Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 5/2021 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#8202.