

AORTIC STENOSIS

The aortic valve is between the aorta, the large blood vessel that takes blood from the heart to the rest of the body, and the left ventricle, the heart's large pumping chamber. Aortic valve stenosis occurs when the aortic valve is narrower than normal. When it is so narrow that it prevents blood flow from the heart, cardiac problems can appear. Aortic stenosis may be due to many diseases and problems. One cause is rheumatic fever, which is a complication of pharyngitis and scarlet fever. Other causes include calcification of the aortic valve, which can occur with age. Congenital abnormalities can also cause aortic valve disease and stenosis. There may be a history of other heart valve diseases, heart disease or heart murmur.

Aortic stenosis is three times more common in men than in women. Symptoms generally do not appear until middle age or later.

Prevention:

Aortic stenosis cannot be prevented, but some of the complications can.

Tell the doctor if you have any history of heart valve disease. A dental procedure, including a professional cleaning, can introduce bacteria into the blood stream, which can infect a diseased heart valve.

Follow the treatment that the doctor recommends to you for conditions that can cause valve disease. Streptococcal infections (pharyngitis or anginas) must be treated to prevent rheumatic fever. Tell the doctor if there is any history in your family of congenital heart diseases.

Symptoms

The symptoms of aortic stenosis may not appear until the disease is quite advanced. If you have any of these symptoms, you must go to the doctor immediately. The symptoms include:

- fainting, weakness or shortness of breath with activity
- feeling that the heart is beating hard (palpitations)
- cough without being sick
- chest pain
- underneath the sternum and which may radiate to the neck, back or arms.
- It often feels like a crushing, tightness, pressure or oppression.
- This increases with exercise and is relieved with rest.
- decreased urine production, even if normal amounts of liquid are drunk
- dizziness

Signs and examinations:

The heart examination may reveal palpable trembling or lifting (vibration or movement that is felt when holding a hand over the heart). A murmur, clicking or other abnormal heart sound is almost always heard upon auscultation (listening to the chest with a stethoscope). Mild pulses or changes in the quality of the pulse in the neck may be felt. Blood pressure may be low.

To confirm the diagnosis of aortic stenosis, medical tests are performed. The most common test for evaluating this condition is an echocardiogram. An echocardiogram uses sound waves to take images of the heart and heart valves. A Doppler echograph may be performed to determine the severity of the stenosis and measure the amount of blood that flows through the valve. A chest X-ray may reveal an enlarged heart. An electrocardiogram may also reveal an enlarged heart. Other diagnostic tests that are performed less frequently include angiography, which consists of introducing a catheter into the heart, injecting a special contrast agent through the catheter and taking X-rays of the heart and blood vessels. A magnetic resonance study of the heart and chest may also be performed to evaluate aortic stenosis.

Treatment:

If there are no symptoms, or if these are mild, observation only is required. If the symptoms are serious, hospitalization may be needed. Medications may be needed to control heart failure. It may be recommended that symptomatic people avoid vigorous physical activities. People with symptoms of aortic stenosis who have difficulty breathing, chest pain and syncope must go to the doctor immediately. Patients who have mild symptoms or who have no symptoms must undergo a physical examination every 6 to 12 months, and they must have an electrocardiogram performed every 1 to 3 years. Generally, an echocardiogram is done each year to confirm that the aortic stenosis has not progressed.

The preferred treatment for symptomatic aortic stenosis is surgical repair or valve replacement. Aortic stenosis is cured with surgical treatment, although there could be ongoing risk of arrhythmias (abnormal heart rhythm). A person may not have symptoms until complications arise. With surgery, it is likely that the outcome will not be favorable if there are signs of angina pectoris or heart failure.

If aortic stenosis is not treated, complications generally occur.

- Left ventricular hypertrophy (enlargement of the heart muscle) caused because the heart pumps blood through a narrow valve
- angina pectoris (chest pain) which generally worsens with physical exercise
- left heart failure
- sudden death due to arrhythmias
- endocarditis

You must go to the doctor if you have symptoms of aortic stenosis. If you were diagnosed with aortic stenosis and the symptoms worsen or you have new symptoms, you must go to the doctor.