



## Aortic Valve insufficiency (regurgitation)

### Definition:

Normally, the aortic valve allows for blood to pass from the left ventricle in the heart to the main body via the aorta.

Insufficiency is when the blood pumped across the valve is leaking back from the aorta into the left ventricle during its relaxation.

### What Causes It?

Cause is usually unknown. It can also be associated with other heart defects.

### How Can it Affect the Heart?

In a child with aortic insufficiency, the blood leaking back into the left ventricle leads to enlargement of the left ventricular size and damage to the heart muscle

### How does the aortic insufficiency affect my child?

If the leak is mild, there will be no symptoms. When leak is severe, symptoms occur in infancy. In some children chest pain, easy tiring, drowsiness or fainting attacks may occur.

### **Management options:**

Children with severe aortic insufficiency will need treatment even if there were no symptoms).

The aortic valve will need to be surgically replaced by a preserved donor valve or a metallic valve according to the patient's condition and the surgeon's recommendations.

### **What activities can my child do?**

If there is no significant leak there are no special precautions needed, if the obstruction is severe or causing symptoms, then some limitation to activity will have to be accounted for. This will vary per patient and will require a more in depth conversation with your pediatric cardiologist, as the physical activity may vary per patient.

### **Following Up in the Future:**

Children with aortic insufficiency need lifelong medical follow-up. Even mild insufficiency may worsen over time. Replaced valves need medication that prevents blood from easily clotting on top of the valve, which requires regular monitoring of the bleeding profile. The pediatric cardiologist will follow up with your child according to his or her condition.

Children may need to receive antibiotics before any surgical or dental procedures to prevent infective endocarditis.