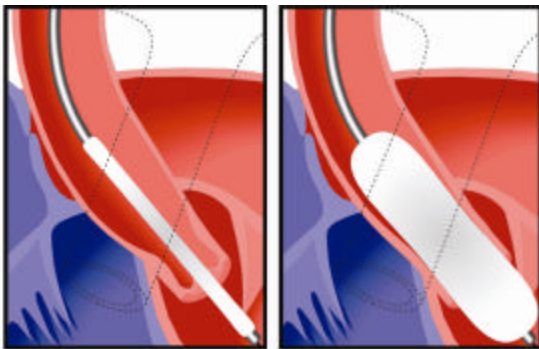
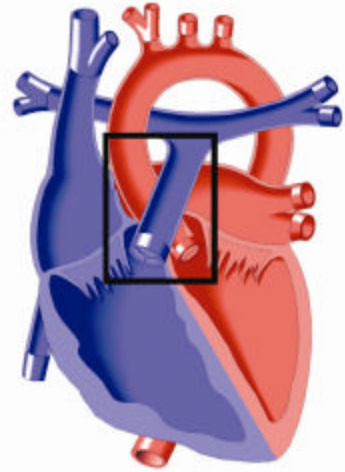


Treatment of Bicuspid Aortic Valve

In most cases, a bicuspid aortic valve does not require any treatment in childhood. A pediatric cardiologist will make specific recommendations for activity restrictions for each patient if valve narrowing or leakage occurs. In general, no other special precautions are required other than regular follow up with a qualified cardiologist. Patients with a bicuspid aortic valve will need endocarditis prophylaxis for dental procedures.

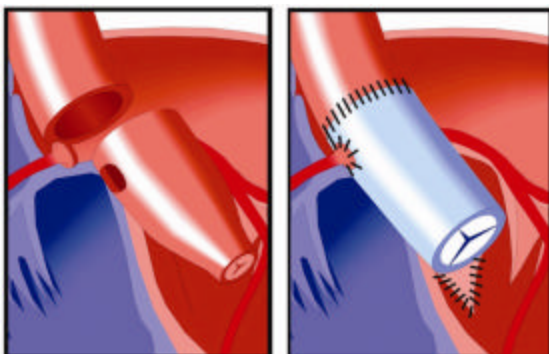
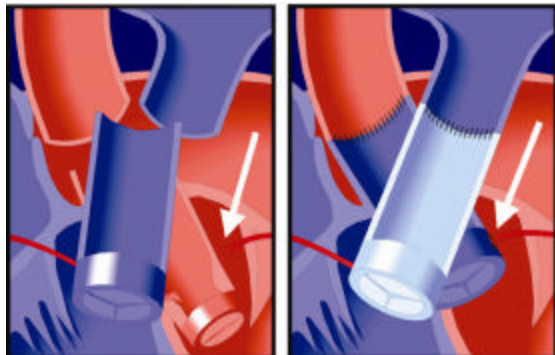
To evaluate the bicuspid aortic valve, the cardiologist follows the patient every 1-5 years with non-invasive tests that might include an electrocardiogram (ECG), echocardiogram, and stress test.

In cases where the narrowing of the aortic valve becomes severe, a balloon valvuloplasty or valve replacement operation (e.g. Ross, Ross-Konno Procedure, or prosthetic valve replacement) may become necessary.



Left: Aortic Valvuloplasty, in which a valvuloplasty balloon (white) is passed into a stenotic (narrowed) bicuspid aortic valve and inflated, widening the opening.

Right: The Ross Procedure, in which the stenotic (narrowed) bicuspid aortic valve is replaced with the patient's healthy pulmonary valve (dark blue). The pulmonary valve is replaced with a prosthesis (light blue) and the coronary arteries are detached from the old aorta and attached to the new aorta (arrows).



Left: The Konno Procedure, in which a stenotic aortic valve is replaced with a prosthesis (light blue), to which the coronary arteries are reattached.