

Treatment of hypertrophic cardiomyopathy

William Taylor*

Department of Biomedicine, University of British Columbia, Canada, USA

*Corresponding author: William Taylor, Department of Biomedicine, University of British Columbia, Canada, USA, E-Mail: William_taylor@hotmail.com

Received date: December 07, 2021; Accepted date: December 21, 2021; Published date: December 28, 2021

Citation: Taylor W (2021) Treatment of hypertrophic cardiomyopathy. Transl Biome, Vol.12 No.12: 214.

Editorial Note

The goal of hypertrophic cardiomyopathy treatment is to relieve symptoms and prevent sudden cardiac death in people at high risk. Your specific treatment depends on the severity of your symptoms. Together, you and your doctor will discuss the most appropriate treatment for your condition. Medications can help reduce how strong the heart muscle squeezes and slow the heart rate so that the heart can pump blood better. Several different surgeries or procedures are available to treat cardiomyopathy or its symptoms. They range from open-heart surgery to implantation of a device to control your heart rhythm.

Septal myectomy: This open-heart surgery may be recommended if medications do not improve your symptoms. It involves removing part of the thickened, overgrown wall (septum) between the heart chambers. Septal myectomy helps improve blood flow out of the heart and reduces backward flow of blood through the mitral valve (mitral regurgitation). The surgery may be done using different approaches, depending on the location of the thickened heart muscle. In one type, called apical myectomy, surgeons remove thickened heart muscle from near the tip of the heart. Sometimes the mitral valve is repaired at the same time.

Septal ablation: This procedure destroys the thickened heart muscle with alcohol. The alcohol is injected through a long, thin tube (catheter) into the artery supplying blood to that area. Possible complications include disruption of the heart's electrical system (heart block), which requires implantation of a pacemaker.

Implantable cardioverter-defibrillator (ICD): An ICD is a small device that continuously monitors your heartbeat. It's implanted

in your chest like a pacemaker. If a life-threatening arrhythmia occurs, the ICD delivers precisely calibrated electrical shocks to restore a normal heart rhythm. ICD has been shown to help prevent sudden cardiac death, which occurs in a small number of people with hypertrophic cardiomyopathy. Hypertrophic cardiomyopathy (HCM) is a complex type of heart disease that affects the heart muscle.

It causes thickening of the heart muscle (especially the ventricles, or lower heart chambers), left ventricular stiffness, mitral valve changes and cellular changes. Thickening of the heart muscle (myocardium) occurs most commonly at the septum.

The septum is the muscular wall that separates the left and right side of the heart. Problems occur when the septum between the heart's lower chambers, or ventricles, is thickened. The thickened septum may cause a narrowing that can block or reduce the blood flow from the left ventricle to the aorta - a condition called "outflow tract obstruction." The ventricles must pump harder to overcome the narrowing or blockage.

This type of hypertrophic cardiomyopathy may be called hypertrophic obstructive cardiomyopathy (HOCM). Stiffness in the left ventricle occurs as a result of cellular changes that occur in the heart muscle when it thickens. The left ventricle is unable to relax normally and fill with blood. Since there is less blood at the end of filling, there is less oxygen-rich blood pumped to the organs and muscles.

The stiffness in the left ventricle causes pressure to increase inside the heart and may lead to the symptoms described below. The narrowing of the left ventricular outflow tract disrupts the proper function of the mitral valve, resulting in outflow obstruction and increased pressure in the left ventricle.