

UCLA offers specialized care for hypertrophic cardiomyopathy



Hypertrophic cardiomyopathy — a thickening of the heart muscle — can obstruct the flow of blood to the body and is associated with disturbances in the heart’s electrical signals. It is the leading cause of sudden cardiac death in young athletes and is among the more common inherited cardiovascular diseases, affecting approximately one person in 500.

While some patients are asymptomatic, others may experience chest pain, shortness of breath, fatigue, palpitations, light-headedness, dizziness and blackouts. Complications can include arrhythmias (atrial fibrillation and ventricular tachycardia), endocarditis (infection of the heart) and sudden cardiac death.

Although symptoms or an abnormal electrocardiogram may indicate hypertrophic cardiomyopathy, a definitive diagnosis is made via echocardiogram or other imaging study techniques. Because of its genetic component, first-degree relatives of those who have the condition should also be screened.

Procedures can restore blood flow

“Hypertrophic cardiomyopathy is quite common for an inherited cardiovascular disease,” says Eugene DePasquale, MD, co-director of the UCLA Hypertrophic Cardiomyopathy Program. “And because of the risk for sudden cardiac death, these patients should be cared for at a specialized treatment center.”

Offering the most advanced therapies — including myectomy and alcohol septal ablation — UCLA physicians are able to restore a more normal blood flow to patients who have become obstructed with excess muscle tissue in the septal walls. “You can either perform myectomy to shave the muscle off with a surgical approach, or use alcohol to induce a small, controlled heart attack in that part of the muscle,” Dr. DePasquale explains. “These treatments thin the muscle and relieve the blockage.”

Treatment options

Management of hypertrophic cardiomyopathy can be complex and requires highly specialized expertise to determine the most appropriate therapies. Patients must be carefully assessed to determine their risk of disability or death.

UCLA offers the latest medical therapies. For patients whose symptoms persist despite medications and for patients with appropriate indications, surgical interventions, minimally invasive procedures and electrophysiologic treatments may be appropriate. Treatments include:

- **Medications** These include beta-blockers, calcium antagonists and disopyramide, which can reduce symptoms by helping the heart pump more efficiently.
- **Myectomy** An open-heart surgery performed to remove the buildup of muscle along the exterior of the septum, a portion of the heart that separates the left and right ventricles.
- **Ablation procedures** When abnormalities of the heart's electrical signals create heart rhythm disturbances, electrophysiologists can perform ablation procedures.
- **Alcohol septal ablation** A safe and effective alternative for patients who are poor candidates for surgery. The minimally invasive procedure involves infusing a small amount of pure alcohol into the artery that supplies the upper septum, destroying excess tissue. Patients typically return home after three days with minimal risk of significant complications. About 5 percent of patients will require a permanent pacemaker following this procedure.
- **Defibrillator procedure** For patients at high risk of sudden death, a defibrillator (ICD) can be implanted under the skin in the chest. The ICD continually monitors the heart's electrical impulses and delivers an electric charge when needed to jolt the heart back to a normal pattern of impulses.

UCLA Hypertrophic Cardiomyopathy Program

The UCLA Division of Cardiology and Ahmanson-UCLA Cardiomyopathy Center offer a comprehensive hypertrophic cardiomyopathy program with a team of experts dedicated to the diagnosis and treatment of this complex condition. Cardiologists who focus on the disorder collaborate closely with cardiac imaging specialists, interventional cardiologists, electrophysiologists and surgeons to offer a full range of treatments. UCLA genetics experts provide pedigree analysis and genetic counseling to expand the scope of care to include family members who may share this inherited condition.

The UCLA Division of Cardiology and Ahmanson-UCLA Cardiomyopathy Center offer patients with the full range of heart disorders comprehensive care that is rated among the nation's best in the latest rankings by *U.S. News & World Report*.

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