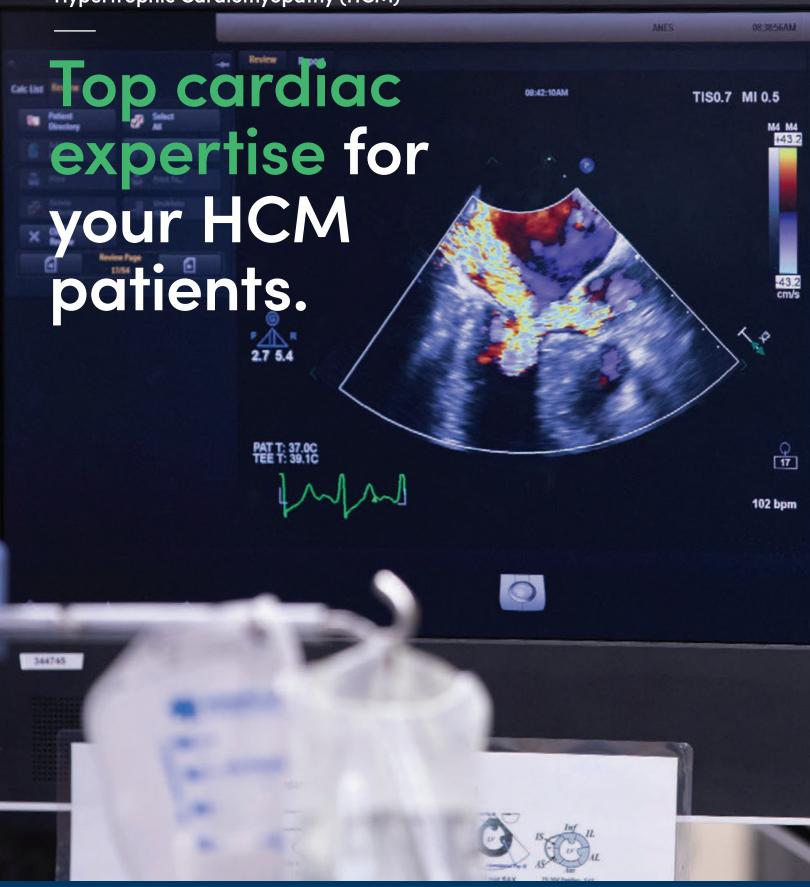
PHILIPS

Hypertrophic Cardiomyopathy (HCM)





AHN offers expertise with recent medical & surgical advances for improved quality of life and longer life expectancy

# Refer to AHN for expert care close to home

# Unmatched expertise for HCM

The AHN Hypertrophic Cardiomyopathy (HCM) Program offers your patients:

**An experienced team** — partnering with you to improve outcomes.

**Specialized heart care** — without leaving western Pennsylvania.

**Patient-centered, customized care** — not found anywhere else in the region.

**Convenience** — by arranging same-day visits with multiple providers and diagnostic testing.

Multidisciplinary collaboration — a treatment team of cardiologists, cardiac surgeons, cardiac maging specialists, electrophysiologists, nutritionists, obstetricians, and behavioral health specialists as appropriate.

HCM causes inappropriate thickening of the heart muscle, often in an asymmetric fashion. The disease affects about 1 in 500 people. It can be a familial inherited condition due to a mutation in one or several genes. It is a common cause of sudden cardiac arrest in young athletes.

HCM affects each patient differently, causing symptoms such as breathlessness (dyspnea), palpitations, lightheadedness (presyncope), or fainting (syncope) through several potential mechanisms. In some people, the thickened heart muscle contributes to diastolic congestive heart failure. In up to 40 percent of patients — usually those with asymmetric thickening of the septum — there can also be symptomatic obstruction of the left ventricular outflow track. Finally, patients may have superimposed arrhythmias as well.

Because this condition has protean manifestations, diagnosis and management can be very complex. It is critical for your patients to be seen by an experienced, multi-disciplinary cardiovascular team.

# Essential diagnostic testing

To classify the type of HCM, as well as the presence and severity of a possible left ventricular outflow tract gradient, we may follow initial echo and stress tests with:

- Resting echocardiogram with provocative testing.
- Stress testing with or without maximal exercise oxygen consumption.
- Exercise stress echocardiogram.
- · Cardiac MRI.
- · Holter monitor.
- Cardiac catheterization with provocative testing.
- Genetic testing.
- Sudden death risk stratification.

Some HCM patients (but not all) are at heightened risk for sudden cardiac death. We risk-stratify each patient and implant ICDs when appropriate to prevent sudden death. In others, non-life-threatening symptomatic arrhythmias can be treated with medications and/or catheter-based ablation procedures.

# **Treatment options**

After confirming an HCM diagnosis, our team works with patients and referring physicians to determine the best evidence-based treatment plan.

Treatment options include:

**Medical therapy** — reduces outflow obstruction and treats arrhythmias.

Antiarrhythmic therapy — Medical therapy, pacemakers, and implantable cardioverter-defibrillators (ICDs) send electrical impulses to maintain a normal heart rhythm and protect patients from sudden cardiac death.

**Alcohol septal ablation** — We use this catheter-based technique to shrink some of the thickened heart muscle to reduce the left ventricular outflow obstruction.

**Transaortic or transapical septal myectomy** — We use this open-heart surgical technique to shave off some of the thickened heart muscle to reduce the left ventricular outflow obstruction.

Mitral valve repair or replacement — Using minimally invasive surgery we repair mitral valve regurgitation or leaky valves, or replace with a biologic or mechanical valve — all to return the heart to maximum, possible function.

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# Treatment options continued

**Left ventricular assist device (LVAD)** — AHN physicians have been pioneers in the development of mechanical circulatory support to help the heart promote circulation, which can improve survival and quality of life for individuals with heart muscle disease, including HCM.

Heart transplantation — Some patients with HCM rarely require cardiac transplantation. However, if appropriate, our patients can rely on our experienced surgical team. Allegheny General Hospital was rated as having the best 3-year survival rate for adult heart transplant in the region.\*

### Follow-up support

Following surgery or other procedures, patients will continue to see their doctors to monitor progress and keep their recovery on track. We encourage cardiac rehabilitation to provide a monitored, customized exercise program. We also offer education and support to manage heart disease through exercise, diet, smoking cessation, integrative medicine, and stress reduction.

## Making a referral

Patients with HCM may have these symptoms, particularly during exercise:

- Chest pain.
- Shortness of breath.
- Fatigue.
- Palpitations.
- Pre-syncope or syncope.
- Sudden death.

Initial consultation, treatment, and testing are at Allegheny General Hospital.

Call 412-359-4869 with pertinent clinical data.

**Urgent referrals:** Contact the on call AGH Heart Failure Attending Physician at **412-359-8066**. Available 24/7.

<sup>\*</sup>AGH has the highest 3-year survival rates for adult heart (single organ) transplant patients performed between 1/1/2014 and 6/30/2016 among all facilities performing such transplants in the 16 western most counties of Pennsylvania. Data provided by Scientific Registry of Transplant Recipients (SRTR). Information available at www.srtr.org.

# **Program Leaders**



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