HCPD HORIZONS CARDIOPULMONARY DIAGNOSTICS

Aortic Stenosis

Narrowing of the aortic valve — what to know

Aortic stenosis is a narrowing of the aortic valve — the “door” blood passes through as it leaves the heart’s main pumping chamber on its way to the body. When that door becomes stiff and narrow, the heart has to work harder to push blood through.

— What is happening

A healthy aortic valve opens widely with each heartbeat. With aortic stenosis the valve thickens and stiffens — most often from gradual calcium build-up with age, sometimes because the valve formed with two leaflets instead of three (a bicuspid valve), and rarely after childhood rheumatic fever. Over time the extra workload can strain and thicken the heart muscle.

— Common symptoms

Aortic stenosis often causes **no symptoms for years**. As the narrowing becomes significant, people may notice:

- Chest tightness or pressure, especially with exertion
- Shortness of breath and reduced ability to exercise
- Dizziness or fainting, particularly during activity
- Unusual tiredness or a fluttering heartbeat

Once symptoms appear, it’s important not to wait — let your cardiologist know promptly.

— How it is diagnosed

A heart murmur heard through the stethoscope is often the first clue. The main test is an **echocardiogram**, which measures how narrow the valve is and how well the heart is coping. Sometimes a CT scan or other tests are done when planning treatment.

— Treatment

No medication can reopen a narrowed valve. When the narrowing is mild or moderate and you feel well, it is simply monitored with regular echocardiograms. When it becomes **severe** — and especially once it causes symptoms — replacing the valve is the definitive treatment and clearly helps people feel better and live longer.

Two main ways to replace the valve

- TAVR / TAVI (transcatheter): a new valve is delivered through a thin tube, usually via the groin, without open-heart surgery — shorter recovery and often a brief hospital stay
- Surgical replacement (SAVR): open-heart surgery to fit a tissue or mechanical valve
- A “heart team” recommends the best option for you based on the severity, your symptoms, age, and overall health

Seek urgent help if you experience

- Fainting or a near-faint
- Chest pain or pressure, or severe shortness of breath — call 911

Questions you might ask your cardiologist

- How severe is my aortic stenosis right now?
- How often should I have an echocardiogram?
- If I need a valve, would TAVR or surgery suit me better, and why?

In an emergency — for severe chest pain, severe shortness of breath, fainting, or signs of a stroke (face drooping, arm weakness, slurred speech) — call **911** right away.

and Cleveland Clinic.

Reviewed by: _____ Date: _____