Faulty heart valves may eventually need surgery

Q: I am 34 years old and I usually do not exercise a lot. However, recently I feel slightly out of breath whenever I walk faster. My general practitioner tells me that I have a heart murmur. What does this mean and should I be concerned?



Source: http://torontotoollibrary.com/

A: Heart murmurs are abnormal sounds the heart makes and are usually picked up by the doctor when listening to your chest with a stethoscope.

Heart murmurs can be harmless, and are due to increased blood flow through the heart or nearby blood vessels, or they may be due to heart valve disease.

There are four types of heart valves: the aortic, mitral, tricuspid and pulmonary valves.

These valves work to ensure that blood circulates normally within the heart.

Valves may fail to close normally, leading to backflow or regurgitation of blood. Or they can become too tight and impede blood flow, which are known as valvular stenosis.

Heart valve disease that develops from birth is called congenital heart valve disease and is due to heart valves not forming properly.

In acquired heart valve disease, the valves are initially normal but develop problems over time.

Examples include degenerative valve disease, valve infections and valvular inflammation.

Other diseases of the heart may also affect the valves, such as coronary heart disease and cardiac muscle disease which may lead to enlargement of the heart chambers and subsequent valve failure.

Cardiac muscle disease results in weakened heart muscles and often heart enlargement. Broadly, the causes of this are also either congenital or acquired.

Some people with heart valve disease have no symptoms and the condition stays the same throughout their lives, without causing any problems.

For others, the disease may worsen until symptoms develop.

Symptoms include breathlessness, fatigue, abnormal heart beats or palpitations, chest discomfort, dizziness and fainting.

When the disease becomes advanced, certain physical activities may become unsafe and, if left untreated, can lead to heart failure, stroke or death from sudden cardiac arrest.

At present there are no medications that cure heart valve disease, although a healthy lifestyle and medications may relieve many of the symptoms and reduce the above complications.

Eventually, the faulty heart valve may need to be surgically repaired or replaced.

A cardiologist can assess the heart valves through cardiac ultrasound or echocardiogram to visualise the valve function in real time.

Other tests such as the three-dimensional ultrasound, trans- oesophageal, in which an ultrasound probe is passed down the oesophagus to scan the heart and stress echo, where the effects of physical exertion on the heart valve are observed during or after exercise on a treadmill or stationary bike, can allow more precise evaluation of the valve.

This is in order to determine if it is safe to exercise and also determine the need for surgery.

There are several options for valve surgery, including open heart surgery to repair the valve or replace it.

More recently, minimally invasive techniques could be used to treat the valve through the insertion of small catheters into the heart via the blood vessels.

As no open heart surgery is involved, there is no surgical scar, much less post-operative pain, faster recovery, and the risk of the procedure is also generally lower.

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This article is also published in The Straits Times on 15 March 2016 (http://www.straitstimes.com/singapore/health/faulty-heart-valves-may-eventually-need-surgery)