

When the heart fails

If the heart does not have enough 'strength' to efficiently pump blood through the body, you probably have heart failure.

THE road for a patient with heart failure can be long and difficult, often with a bleak prognosis at the end of the journey.

However, if there is something patients can do to prolong their lives, it is to not only adhere to the treatment protocol mapped out by the cardiologist, but to also be open in discussing matters with them.

National Heart Institute Heart Failure and Heart Transplant Centre clinical director and consultant cardiologist Datuk Dr Azmee Mohd Ghazi says the most important part of treatment is after a patient is discharged from hospital.

"That is where they lose it. They don't have support or they get depressed because of the diagnosis," he says.

"They feel there are too many medications or they experience side effects.

"Don't be scared to get an opinion from your doctor. Patients need to tell us what their problems are, or if they're having problems with their medication. You have to make sure there are no major side effects from the medicine."

Dr Azmee also feels that while hospital care at institutions like IJN (the Malay acronym for the National Heart Institute) is adequate because there is a specific centre to treat heart failure, the one thing still lacking in Malaysia is support for patients outside the hospital setting.

He has even thought of setting up a support group for patients.

"Once you go home, the hospital cannot track you.

"In the UK, there is a system where nurses give house visits or call patients. This is to ensure we continue to support them at home to prevent readmission," he adds.

The idea, he says, is to have hospital staff calling patients once a month to ask how they were doing and whether they were having problems with issues like their medication or weight.

He adds that it is not an easy task, although one method that is being practised abroad is having community heart failure nurses who cover a certain area.

This is not yet feasible in Malaysia due to lack of manpower and funding.

What causes heart failure?

The most common cause of heart failure in Malaysia and worldwide is coronary artery disease (CAD), also known as ischaemic heart disease.

The Statistics Department reported last year that the main cause of death in Malaysia for the past 10 years from 2005 to 2014 was ischaemic heart diseases.

It recorded the highest percentage in the number of deaths in 2014 at 13.5%. This was followed by pneumonia (12.0%), cerebrovascular diseases (7.1%), septicaemia (6.1%) and transport accidents (5.6%).

Ischaemic heart diseases was also the main cause of death for those aged between 15 and 65 at 13.8% in 2014, compared to 13.3% in 2013.

When a person with CAD has a heart attack, there will be a degree of heart failure as the muscles have experienced damage.

Another cause of heart failure, says Dr Azmee, is cardiomyopathy where the heart muscle is not "healthy".

While some are born with the condition, others may have been infected with a virus that causes the condition.

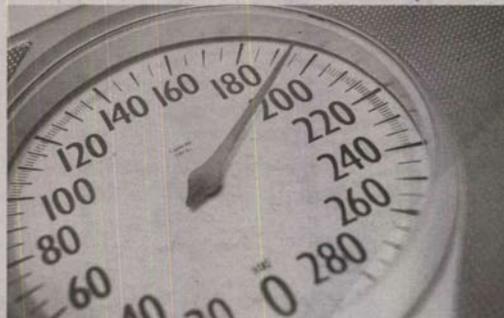
Patients also experience heart failure because of valve disease



Medications such as beta blockers, ACE inhibitors, ARBs, MRAs and ARNIs can improve survival in heart failure patients. — AFP



Dr Azmee stresses the importance of out-of-hospital support for heart failure patients. — Handout



Careful monitoring of fluid intake is vital in those with heart failure. Hence, daily measurements of weight is important as this can tell you whether you're drinking too much water. — AFP

that can either be congenital or developed later in life.

Another common cause, he says, is arrhythmia (irregular heart-beat).

Heart failure can also be due to hyperthyroidism that has been uncontrolled over many years.

Treating heart failure

Dr Azmee says that treatment starts almost immediately once a diagnosis has been confirmed.

This is done by an examination by a doctor, ECG and echo cardiography (which measures the actual heart function; if it is less than a certain percentage, heart failure has happened).

The most important component of treatment is lifestyle change. This specifically refers to fluid and salt restriction.

"Daily measurements of your weight is also important. It is standard for all patients.

"If, for example, you put on 2kg within the last two days, it is not because of fat. It is because of

water," he says.

Patients will then have to start restricting their fluids and make sure they do not put on any more weight, as failure to do so will lead them to having decompensated heart failure (sudden worsening of heart failure symptoms).

"That is when patients get admitted to the ward," he says, adding that the heart becomes weaker with every episode.

"And because of that, the prognosis is lower.

"The more admissions that you have, the poorer the prognosis."

Patients can also develop kidney problems as the heart is too weak to pump blood to the organ. This leads to cardiorenal syndrome.

There is also medication to improve survival.

These include beta blockers, angiotensin-converting enzyme (ACE) inhibitors, angiotensin receptor blockers (ARBs) and mineralocorticoid receptor antagonists (MRAs).

There are also the angiotensin receptor neprilysin inhibitors (ARNI) that have proven able to

reduce mortality and prevent hospital readmission by almost 20%, compared to ACE inhibitors.

"But it is new and very expensive. It is about RM200 to RM500 a month, but for patients who take a combination of beta blockers and MRAs... it can be a challenge," he adds.

Patients are also prescribed diuretics to remove water from their bodies.

"This is more for symptomatic relief. You need to remove the water because the heart is too weak to pump blood," he says, adding that diuretics would help alleviate symptoms like shortness of breath and fatigue.

"It is because of accumulation of water. They have difficulty sleeping at night.

"Some people cannot lie flat when they have heart failure. They need at least two to three pillows because they will have shortness of breath if they lie flat."

Another method is by using an implantable cardioverter defibrillator (ICD), cardiac synchronisation

therapy (CRT) or a mechanical circulatory support (a device that is implanted inside the heart to "prop up" the weakened muscles and act as a pump).

There is also heart transplantation, but Dr Azmee says that this comes with strict criteria as there are risks during surgery and side effects from the immunosuppressants that are given post operation.

The end game

Dr Azmee says that, on average, about 50% of patients die within 10 years after diagnosis.

The number of Malaysians developing heart failure is also increasing as there are more of them having CAD because of lifestyle choices such as consuming foods high in sugar and cholesterol.

To preempt CAD, he advises Malaysians to detect it early by going to the doctor and having blood tests done so treatment can be started if necessary.

This, in turn, can prevent heart failure from happening.

"The clear message is to know early. People need to come for regular checkups, they need to know what their numbers (blood pressure and cholesterol) are," he adds.

"Some patients think it is because they are old and that's why they have shortness of breath.

"That is wrong. They need to get it checked.

"Then, there are people who live in denial. But once they develop the problem, they need to take accountability and they need to be responsible in terms of looking after themselves."

Datuk Dr Azmee Mohd Ghazi is a consultant cardiologist and Clinical Director of the National Heart Institute's Heart Failure and Heart Transplant Centre. This article is brought to you by IJN.