When the heart fails

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

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

that can either be congenital or developed later in life. Another common cause, he says, is arrhythmias (irregular heart-beat).

Heart failure can also be due to hypertension (high blood pressure) which has been uncontrolled over many years.

Dr Azmeesh 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 (ECHO) 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 fluid. 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 cardiac renal syndrome.

There is also medication to improve survival. These include beta blockers, angiotensin-converting enzyme (ACE) inhibitors, angiotensin receptor blockers (ARBs) and interventional (angio) receptor antagonists (IRAs).

There are also drugs that improve receptor function (inhibitors) that have proven able to reduce mortality and prevent hospital readmission by almost 20% compared to ACE inhibitors.

"It is new and very expensive. It is about RM2000 to RM5000 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 diabetes 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 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 Azmeesh 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 Azmeesh 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 prevent CAD, he advises Malaysians to eat 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 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 account ability and they need to be responsible in terms of following after themselves."