



My Doctor Knows Dr Tan Li Ping

KIDNEY DISEASE IS SILENT

There are no symptoms until 50-70% of kidney tissue is damaged

THE modern understanding of kidney disease is remarkably recent. It was only in 1827 that Richard Bright described in *Report of Medical Cases* a condition combining the presence of swelling or oedema with the presence of protein in the urine (proteinuria) – attributing it to a problem with the kidney.

Since one of the functions of the kidney is the filtering of waste products from the blood, we can estimate the health of the kidney by monitoring the filtration capacity or capability of the kidney, or its glomerular filtration rate (GFR).

The integrity of the kidney filter can also be assessed by examining the urine.

If there is blood or protein in the urine, this may suggest damage to the kidney. An ultrasound of the kidney can be helpful.

In 2002, kidney disease began to be defined based on GFR and classified into stages 1 to 5, with stage 5 being the most severe (kidney function has declined to the point that renal replacement therapy such as dialysis or transplantation may be required).

Today, this concept of staging has made it easy for the public to understand the degree of kidney function (or dysfunction) they have.

If these abnormalities last for three months, the kidney disease is considered chronic.

In Malaysia, the main cause of kidney disease is type 2 diabetes mellitus and hypertension. It is not

unusual, however, if a cause cannot be identified.

In cases such as these, the kidney disease may possibly have been the result of infections acquired during a young age that has left the kidney damaged.

The damage accumulates over time, leading to slow deterioration of kidney function. Other possible reasons could be exposure to drugs, supplements or chemicals that injure the kidney.

What is important to understand is that often, the damage that occurs to the kidney is silent.

This means that unlike having a heart attack, where the patient would complain of chest pain, kidney disease usually produces no symptoms at all until around 50% to 70% of kidney tissue has been damaged. This makes getting regular examinations very important.

Kidney disease patients can have myriad symptoms. Some are quite generalised and non-specific, such as fatigue, lethargy and appetite changes. More specific symptoms include nausea, vomiting, itching, metallic taste in the mouth, swelling of the extremities, difficulty breathing and a change in urine characteristics.



End-stage renal failure is imminent for people who do not receive adequate treatment for kidney disease, especially when their condition is exacerbated by existing risk factors such as type 2 diabetes mellitus.

You are more at risk of developing kidney disease if you have diabetes, high blood pressure, heart disease, high cholesterol or smoke.

Age and weight are also risk factors. A family history of kidney disease should also make you more alert.

In general, treatment for patients with kidney disease is dependent upon the causal condition.

Medications that can target the pathological processes that lead to kidney damage are used.

In addition, dietary interventions can also be very helpful in slowing down the deterioration of the kidney. The core of dietary strategies for improving kidney health is in the reduction of protein intake to minimise the production of waste.

Ultimately, when the kidney fails to function adequately to maintain the healthy functioning of the body, nephrologists will advise using kidney support treatments. These treatments are known as dialysis.

There are two categories of dialysis that are widely used, haemodialysis and peritoneal dialysis. Both have their pros and cons and the choice of which modality of dialysis depends on discussion between the patient and the doctor.

The best choice for most kidney failure patients, however, is to obtain a kidney transplant to restore normal kidney function.

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