

Let's Talk About: Chronic Kidney Disease



ST. PAUL'S HOSPITAL
COMMUNITY FORUMS

What is Chronic Kidney Disease?

Kidney disease describes a variety of diseases and disorders that affect the kidneys. Most kidney diseases attack the filtering units of the kidneys—the nephrons—and damage their ability to eliminate waste and excess fluids.

Chronic kidney disease (CKD) is defined as the presence of kidney damage, or a decreased level of kidney function, for a period of three months or more. CKD can be divided into five stages, depending on how severe the damage is to the kidneys, or the level of decrease in kidney function.

Usually, kidney disease starts slowly and silently, and progresses over a number of years. Not everyone progresses from Stage 1 to Stage 5 (also known as End-Stage Renal Disease - ESRD or end-stage renal failure). To sustain life at this stage, dialysis or kidney transplantation is needed.

Did you know?

- Kidney disease can strike anyone at any age.
- An estimated two million Canadians have kidney disease, or are at risk.
- Each day, an average of 14 Canadians learn that their kidneys have failed.
- In 2008, there were 36,638 Canadians on renal replacement therapy and this number is expected to double over the next 10 years.

Common Causes

There is no single cause of chronic kidney disease. Some forms of the disease may be inherited, while others are acquired.

The two most common causes are diabetes and high blood pressure. Others are glomerulonephritis (nephritis), polycystic kidney disease, urinary tract obstruction, reflux nephropathy, and drug- or medication-

induced kidney problems. Bacteria such as E. coli and bacterial infections, such as strep throat, are other culprits.

Other problems can affect the kidneys. Some of these are kidney stones, Alport syndrome, Fabry disease, and Wilms' tumor.

Warning Signs

As kidney disease usually progresses silently, often destroying most of the kidney function before causing any symptoms, people at risk should be evaluated regularly. These people include those with diabetes, high blood pressure or blood vessel diseases, and close relatives of people with hereditary kidney disease. A blood or urine test may be necessary to check for kidney problems.

Signs and Symptoms That May Indicate Kidney Disease

- High blood pressure (hypertension)
- Puffiness of the eyes, hands and feet
- Passage of bloody, cloudy or tea-coloured urine
- Presence of protein in the urine (uremia)
- Excessive foaming of the urine
- Frequent passing of urine during the night
- Passing less urine or difficulty passing urine
- Fatigue
- Loss of appetite or weight
- Persistent generalized itching

Source:

The Kidney Foundation, www.kidney.ca

Join medical experts from Providence Health Care for monthly community forums at St. Paul's Hospital. Each month features a different health topic with time to pose questions to the experts.

The forums are free and take place the third Wednesday of every month.

7:00 – 9:00 pm
(doors open at 6:30)
New Lecture Theatre
St. Paul's Hospital
1081 Burrard Street

For more information and to register, please email ownyourhealth@providencehealth.bc.ca or call 604-806-8495.

This evening's presentations will be available to view on our website:

www.phcmedicine.ca



Research and Treatment at St. Paul's Hospital

Just as important as the high-quality care we provide is our teaching and research mandate that helps us better understand this condition, improve patient care and develop new treatment solutions.

Providence Health is the largest kidney treatment, research and education program in the province. Since 1986, Providence Health has grown into a national leader in kidney transplantation and was the first in Canada to perform a transplant through the new Paired Organ Donor Exchange program.

Community Dialysis Clinics are also part of Providence's dialysis services for people with kidney disease. Clinics are operated in Sechelt, Powell River, Richmond, Squamish, Vancouver, and Vancouver's North Shore.

Treatment Options

The main treatments for kidney disease are a proper diet and medications, dialysis, transplantation and conservative care.

In the early stages of kidney disease, proper diet and medications may help to maintain the critical balances in the body that your kidneys would normally control. However, when kidney function drops below about 10-15% of normal, diet and medications are no longer enough. You will need dialysis or a kidney transplant, combined with medications and a healthy diet.

Dialysis

Dialysis is a treatment: it does not cure kidney disease or make kidneys well again, and it does not fully replace your kidney function. Unless you receive a kidney transplant, you must continue to have dialysis for the rest of your life. Two types of dialysis are used to treat the later stage of chronic kidney disease: hemodialysis and peritoneal dialysis.

Hemodialysis

Blood is withdrawn from the body by a machine and passed through an artificial kidney called a dialyzer to "clean the blood".

Hemodialysis is done in a hospital dialysis unit and treatment normally takes four to five hours. Usually, you need three treatments a week, however, certain people may need more frequent treatments or longer treatments. Sometimes shorter treatments are sufficient.

Once a patient on hemodialysis is stable, it may be possible to have hemodialysis treatments in a clinic away from the hospital, in a self-care centre (with some help from the staff), or at home. Special training is needed for self-care or home hemodialysis and not all types of treatment are available in all communities.

Peritoneal Dialysis

Peritoneal dialysis works on the same principle as hemodialysis, but your blood is cleaned while still inside your body rather than in a machine.

The inside of your abdomen—your peritoneal cavity—is filled with a special dialysis fluid that looks like water. This exposes blood vessels in the peritoneum to the fluid. The peritoneum functions just like the artificial membrane in a dialyzer. Excess water and wastes pass from the blood through the peritoneum into the dialysis fluid. The fluid is then drained from your body and discarded, and the process is repeated four to six times in every 24-hour period.

Transplantation

With advances in kidney transplant methods and improvement in transplant success, a kidney transplant is now widely considered to be the best way of treating chronic kidney disease for many people. A transplant may offer the best chance of returning to a more normal life, but it is not suitable for everyone.

Source:

The Kidney Foundation, www.kidney.ca

St. Paul's Hospital is an acute care, teaching and research hospital located in downtown Vancouver. It is home to many world-class medical and surgical programs, including heart and lung services, HIV/AIDS and kidney care.

St. Paul's serves both the local community and patients from across BC and the Yukon. St. Paul's is one of 14 health care facilities in Vancouver operated by Providence Health Care, one of Canada's largest faith-based health care organizations. Providence's 1,000 physicians and 6,000 staff deliver compassionate care to patients and residents in British Columbia while training medical professionals and making innovative advances in research.

To support programs like this at St. Paul's Hospital, please visit www.helpstpauls.com to make a donation to the Department of Medicine Academic Fund.

www.phcmedicine.ca