What is Kidney Cancer

Kidney cancer, also known as renal cancer, is a condition in which the kidney cells develop malignancy (cancerous) and outgrow their control, eventually forming a tumor. Nearly all kidney cancers begin in the linings of the tiny tubes (tubules). This is known as renal cell carcinoma.

In today's time, most kidney cancers can be detected before they spread to other organs. It is easier to treat cancers that are caught early. These tumors can become quite big before they are diagnosed.

Let’s understand about Kidney and its function before knowing about Kidney Cancer in detail.

About Kidney and its functions

The kidneys are bean-shaped organs that measure about the same size as a fist. They are located in the lower abdomen or either side of your spine.

The main function of the kidneys is to eliminate excess water, salt and other waste products from blood that comes in through the renal arteries. These substances are converted to urine. The renal pelvis is where urine collects. It then exits the kidneys via long, slender tubes known as ureters. The ureters connect to the bladder where urine is stored until it's time to urinate.

Other jobs are also performed by the kidneys:

They produce a hormone called Renin which helps to control blood pressure.
The hormone erythropoietin is made by them to ensure that the body has enough red cells. This hormone instructs the bone marrow on how to produce more red blood cells.
Although our kidneys are vital, we can only function with one kidney. A lot of Americans live normal, healthy lives with one kidney.

Many people don't have functioning kidneys and can survive on dialysis. A machine specially made to filter blood like a kidney is the most common type of dialysis.

Some symptoms of kidney cancer include:

Urine containing blood
Lower back pain
Loss of appetite
Weight loss
Fever
Anemia

Causes of Kidney Cancer
It is not known what causes the majority of kidney cancers.
Kidney cancer is caused by mutations in the DNA of some kidney cells. The instructions in a cell's DNA are what tell it how to behave. These instructions tell cells how to divide and

grow quickly. A tumor can develop from the accumulation of abnormal cells. Some cells may break away and spread (metastasize), to other parts of the body.

The following factors can increase your risk of developing kidney cancer:

You are more likely to get kidney cancer if you're older.
Smokers are at greater risk for kidney cancer than non-smokers. After quitting smoking, the risk of developing kidney cancer decreases.
Those who are overweight are at greater risk of developing kidney cancer than those who are healthy.
Hypertension (high blood pressure) increases your chance of developing kidney cancer.
Long-term dialysis for chronic kidney disease. Higher risk of developing kidney cancer.
A family history of kidney disease

Steps to prevention Kidney Cancer

Your risk of developing kidney cancer may be reduced if you take steps to improve your overall health. You can reduce your risk by:

Stop smoking. There are many options available for quitting, including support programs and medications. Talk to your doctor about your desire to quit and explore your options.

Keep a healthy body weight. Make an effort to keep it that way. Reduce the amount of calories that you consume daily and get active every day if you are overweight or obese. Talk to your doctor about healthy ways to lose weight.

Lower your blood pressure. Have your doctor check your blood pressure at the next visit. You can talk to your doctor about ways to lower your blood pressure. Lifestyle changes such as weight loss, exercise and lifestyle modifications can all help. Some people might need to take medication to lower blood pressure. Talk to your doctor about your options.

Diagnostic tests for kidney cancer may include:

Biopsy: The removal of small amounts of tissue to be examined under a microscope.

Urine test: The clinicians will test the urine to determine if it contains any tumor cells.

Cystoscopy: This allows the doctor to view inside the body using a thin, flexible, lighted tube called a cystoscope

Computed Tomography (CT) or CAT scan: Creates a 3-dimensional image of the inside of your body using Xrays taken at different angles

Magnetic resonance imaging (MRI), uses magnetic fields and not x-rays to create detailed images of the body
Positron emission imaging tomography (PET scan): Takes images of the organs and tissues within the body

Ultrasound: Uses sound waves to capture images of internal organs

Blood test: To check for blood levels of certain proteins, you will need to have blood tests.

When to see a doctor
Make an appointment with Dr. Jamal Azmi if you have any persistent signs or symptoms that worry you.

Call for appointment on :