

Forget labs, do your urine test at home

City Doctor Develops Kit Which Will Help To Detect Kidney Ailments Early

Pushpa Narayan | TNN

Chennai: How long have you been thinking of getting a urine test done to make sure your kidney is in good shape? Doctors estimate that more than 60% of patients postpone such tests, lowering chances of early detection of renal disorders. Chennai-based nephrologist Dr Rajan Ravichandran has now developed a diagnostic kit that can be used at home to measure levels of sugar, protein and acid in the urine.

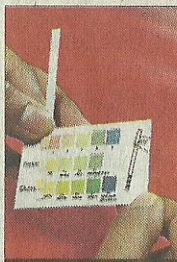
“Such a product is not available in the market. I have seen several patients coming to me very late because they did not get the test done on

time. We are now using the kit for research and awareness. It is supported by the Balaji Medical and Education Trust,” said Dr Ravichandran.

The kit, which comes with a colour-coded strip and sheet inside a zip-lock cover has simple directions to use. Like the pregnancy home test kits, this strip has to be dipped in urine. The change in colour of the strip can be matched with a colour-coded sheet to ascertain the value.

While traces of protein is an indication of a probable kidney-disease, presence of sugar can alert the patient on diabetes. Acid levels indicate lifestyle factors such as diet.

Do-It-Yourself



▶ The home kit consists of a **colour-coded strip and sheet**. The strip has to be **dipped in urine**. The change in colour of the strip can be **matched with the colour-coded sheet** to ascertain the value

▶ Traces of protein is an indication of a probable kidney disease. **Presence of sugar can alert the patient on diabetes**. Acid levels indicate lifestyle factors such as diet

“We are sending samples to at least 5,000 people in the first phase. They will have to fill up the feedback form and send it to us. If they find the values abnormal, they will have to meet a doctor,” he said.

The results can be sent as feedback to the trust through post or mailed at balajimed1998@yahoo.com.

In a country that is estimated to have more than 40 million diabetics and an equal

number of people with hypertension, there is a high risk of people getting chronic kidney disorders. Early detection of such diseases will help the patient prevent deterioration of the organ.

More than 7,000 people register for dialysis in the city every year. Dialysis is the artificial filtration for the kidney when the organ loses the ability to carry it the function.

At present, the trust spends nearly ₹10 towards each kit. “We know we eventually have to market this. But if that happens, we will ensure the cost is much less than that at a diagnostic lab. It will not cost more than ₹25,” he said.

Court orders family pension for woman

Special Correspondent

CHENNAI: The Madras High Court has directed the Principal Accounts Officer (PAO), Office of the Principal Accountant-General, Chennai, to sanction family pension to a woman, legally wedded to a Forester after his first wife's death.

Justice D.Hariparanthaman passed the order on a petition by Valliammal who sought to quash an order of July 1999 of the PAO and the consequential order by the District Forest Officer (DFO), Sathyamangalam Division, of August 1999, and direct them to pay family pension from December 7, 1996, the date her husband died.

Valliammal was deserted by her husband in 1975. The PAO returned the proposal for family pension and directed the DFO to produce death certificate of the first wife, proof of wedding of petitioner with the government servant and reason for not declaring the petitioner as the second legally wedded wife. The petitioner wrote stating that the first wife's death was not registered and it was not possible to get the death certificate. Her marriage with the forester was also not registered.

Now, test for albumin in urine at home

Ramya Kannan

CHENNAI: The earliest indicator of kidney disease is the presence of protein (albumin) in the urine. It is now possible to test at home the presence of albumin in the urine, a test that has hitherto been confined to the laboratory.

"Ideally, there should be no protein in the urine. The presence of albumin indicates that something may be wrong with kidney function," explains Rajan Ravichandran, senior nephrologist. "In this country, while home tests are available for a number of parameters, including sugar and blood pressure, there was no home test for urine," he adds. A home test would be able to take the message of renal care to patients just as a glucometer has given patients the power to keep tabs on their blood sugar.

While chronic kidney disease (CKD) is a serious global problem, it is especially relevant in India which has high incidence of known risk factors - diabetes and hypertension. CKD should be detected early to prevent further progression to a stage

requiring dialysis or transplantation, says Dr. Ravichandran. He adds that 80 per cent of kidney disease can be identified by the presence and levels of albumin in urine.

"We wanted to make it easy and convenient to test the urine not only for protein but also for glucose at home itself," explains Dr. Ravichandran, who also heads Balaji Medical and Educational Trust.

The Trust sends to people a plastic pouch with a test strip along with a colour code indicator completely free of charge to enable them to test their urine at home. The strip will have to be used with the first morning urine sample for the best results and the colours compared with the guide provided.

"The problem hitherto has been that the strip does not tolerate moisture, so it gives untrustworthy results if it has been exposed to moisture by chance. We have packed the strip with a silica gel pouch and given specific instructions on immediate use, adds Dr. Ravichandran. With over a 100 patients already trying it at home, and results proving reliable on

comparison with laboratory findings, the team is hopeful of its function as an epidemiological tool in the community setting.

The samples will be sent to various corporate offices to be distributed among employees, in an attempt to cover 5,000 people in the first phase. One of the top corporates to take this project on is Tata Consultancy Services. Its Vice-President (Global Alliances) K.Jayaramkrishnan explains, "We are planning to take samples from two of our offices - the Cathedral Road and Habibullah Road branches. We had a do-it-yourself demo for employees. Once they are done with the test, they will fill up the attached form and we will send this back."

The form tracks age, sex, and history of diabetes and hypertension of everyone using the test strip. It also records the relevant results (pH, protein, and glucose) as indicated by the colours on the strip. If anyone wants to be intimated about the results, that option too is available on the form. This data will be analysed for trends and patterns, adds Dr. Ravichandran.