

New test may soon detect curable hypertension

Scan, now in clinical trials, could be more accurate, less invasive than current method

Timothy Goh

Patients here with hypertension may soon have access to a scan to test if they have a curable form of the disease.

The scan is expected to be less invasive, and could be more accurate, than current methods to test for this form of the disease.

The new procedure involves the ¹¹C-Metomidate PET/CT scan, which is being used to identify small growths in a patient's glands and reveal if they are producing too much of the hormone aldosterone, which results in excess salt in the body, causing hypertension.

PET refers to the positron emission tomography imaging test, which uses radioactive tracers con-

tained in a special dye, while CT refers to the X-ray computed tomography scanner, which produces a series of images of the body.

The new procedure is currently undergoing clinical trials at the Clinical Imaging Research Centre at the National University of Singapore's (NUS) Yong Loo Lin School of Medicine.

The researchers behind the trials – Professor Roger Foo of NUS and Adjunct Assistant Professor Troy Puar, who is with the Changi General Hospital – announced this yesterday.

A quarter of those aged 25 and above here have hypertension, which, if left untreated, can lead to heart and kidney disease and stroke.

While most patients with hypertension have no underlying curable cause for the condition, about 5 per



(From far left) Adjunct Assistant Professor Troy Puar, hypertension patient Lim In Chong and Professor Roger Foo at the Clinical Imaging Research Centre at the National University of Singapore's Yong Loo Lin School of Medicine.
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cent here have a potentially curable form called primary aldosteronism.

To get tested for it, patients currently need to undergo an invasive and difficult procedure called adrenal vein sampling, which produces inconclusive results in half of the patients.

With the scan, Dr Puar said, small growths in a patient's glands above the kidneys can be identified to show if they are producing too much aldosterone – all in less than an hour, without the need for hospi-

talisation.

The technique was developed in Sweden but Singapore is the first country in Asia with the facilities to carry out the scan. Dr Puar said that only two other centres – in Britain and Finland – currently use the technique.

The trial in Singapore will need to undergo a larger patient cohort validation before being ready for clinical use here. Currently, 24 patients have undergone the new procedure.

The announcement was made on

the sidelines of the inaugural National University Health System Innovation Summit, held yesterday at the NUHS Tower Block in Kent Ridge.

At the event, Deputy Prime Minister and Minister for Finance Heng Swee Keat announced the establishment of a new mentorship programme – the Brenner Fellowship, which is named after molecular biologist Sydney Brenner, widely regarded as the “father of biomedical sciences in Singapore”.

Dr Brenner, who died earlier this year at the age of 92, came to Singapore in 1983 to advise the Republic on the development of its biotechnology sector.

The fellowship aims to nurture and support talented Singapore-based undergraduates who are keen to pursue research in biomedical sciences by giving them opportunities to travel overseas to work under the mentorship of leading scientists.

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