

## Breakthrough against time bomb of high blood pressure

# Risk of stroke slashed

MELBOURNE doctors have found a groundbreaking method to turn off the ticking time bomb of high blood pressure.

Using a special catheter and radio waves to disable nerves in patients' kidneys, cardiac experts have dramatically reduced the blood pressure of those who live in constant fear of a stroke or heart attack.

The team from the Baker Heart and Diabetes Institute, Monash University and St Vincent's Hospital have already treated 50 Victorians in a trial. They will unveil their

### Grant McArthur

medical reporter

results today at the world's biggest gathering of cardiac experts, in the US.

Up to 1.5 million Australians suffer dangerously high blood pressure that cannot be overcome by medication.

Associate Prof Markus Schlaich, from Baker, said the discovery would make a huge impact.

"These patients are at extremely high risk. It is pretty much a time bomb," he said. "If we don't manage to control

blood pressure it is only a matter of time when they have their first cardiovascular event, normally in the form of a stroke or heart attack."

During a 45-minute operation, a specially designed catheter is passed through a patient's femoral artery and into their renal system.

Sympathetic nerves lining the walls of the renal artery are then pinpointed and blasted with radio waves produced by the catheter.

These waves are harmless to other tissues.

While it has long been

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known that the sympathetic nervous system is a key contributor to high blood pressure, Prof Schlaich said the reasons it overrides blood pressure in some people was still not known.

But after the latest trial, it is known that switching off the nerves can reduce blood pressure from very dangerous levels of more than 200mmHg

(millimetres of mercury) to below 140mmHg, the level considered safe. While blood pressure still remained higher than normal in most of the 50 trial patients, the average improvement was a significant 30mmHg.

Gael Lander, 65, had been unable to control her high blood pressure for more than 30 years.

But she was relieved after having the catheter treatment in 2007 and seeing her blood pressure drop from 210mmHg to 140mmHg.

"You feel like a walking time bomb, particularly when I watched my mother die 18 months ago from a severe stroke, which left her unable to speak or move," she said.

"Both my parents had high blood pressure, and it brings it home to you because you can't change your genes."

The results of the trial will be published today in the leading British-based medical journal *The Lancet*.