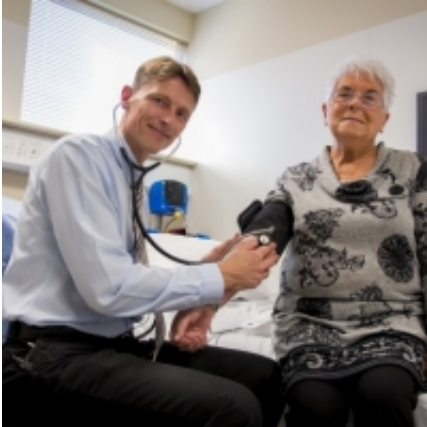


# World-first hypertension treatment a success

August 31 2017, by Jess Reid

---



Researchers at The University of Western Australia have taken a step forward in the fight against high blood pressure after the first human trials of a ground-breaking treatment produced successful results.

Professor Markus Schlaich holds the Dobney Chair in Clinical Research and has been part of a global effort to effectively treat resistant hypertension at Royal Perth Hospital.

The cutting-edge procedure targets carotid bodies, the tiny organs found on either side of the neck, which regulate the cardiovascular and respiratory systems.

The procedure guides a catheter through the femoral vein in the groin up

to the neck and ends adjacent to the carotid body. The device then specifically targets the organ with short ultrasound energy pulses, rendering it ineffective.

Professor Schlaich said exposing a carotid body to ultrasound could permanently lower [blood pressure](#) in [patients](#) who failed to respond to medication or [lifestyle changes](#).

"We know that patients with uncontrollable [high blood pressure](#) will often have an overactive [carotid body](#), so we're looking to silence it or at least reduce its activity," Professor Schlaich.

"The therapeutic ultrasound can emit waves of energy that travel through tissue and target the organ of interest."

Cardiovascular disease is an enormous burden on health and society, with more than 30 per cent of Australians affected by high blood pressure and more than 8.5 million deaths each year worldwide, directly attributable to uncontrolled blood pressure.

78-year-old patient Agnes Johnson had suffered from high blood pressure for 30 years and was the first person in Australia to undergo the procedure in 2016.

After the treatment, Mrs Johnson said her blood pressure dropped from 220 over 90 to a more manageable 140 over 80 mmHg.

"The medications I tried kept making me sick so having this done was of huge benefit to me. The procedure was fine, I had no side effects and now I feel much better," she said.

Professor Schlaich said the world-first catheter based approach had been performed on 29 patients in Australia and Europe and he hopes to have

the procedure readily available around the world in three to four years.

"There is clear evidence to demonstrate that if you manage to reduce blood pressure you can dramatically reduce the risk of heart attack and stroke," he said.

"This approach won't be used for everyone with hypertension but it could be a great approach for those patients whose blood pressure cannot be controlled with medication or lifestyle changes."

Provided by University of Western Australia

Citation: World-first hypertension treatment a success (2017, August 31) retrieved 2 May 2024 from <https://medicalxpress.com/news/2017-08-world-first-hypertension-treatment-success.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.