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Media Statement

WA RESEARCHERS WIN WORLD-LEADING DIABETES-HEART ATTACK TRIAL FUNDING

West Australian researchers have won funding to carry out a world-leading trial that could reduce the chances of people with type 2 diabetes who've had a heart attack suffering further heart failure.

Fiona Stanley Hospital cardiologist Dr Girish Dwivedi has been awarded charity Diabetes Research WA's \$60,000 Jamie Cripps 2021 Research Grant for the project, which focuses on a new class of medications known as sodium-glucose co-transporter-2 inhibitors (SGLT2Is), and could also ultimately benefit those with type 1 diabetes.



Heart attacks and strokes are up to four times more likely in people with diabetes, despite treatment advances, and in those who've recently experienced cardiac arrest, the risk of recurrent heart attack or death is increased substantially.

"In a small non-randomised study, we found that in patients with type 2 diabetes and heart attack, starting treatment with the SGLT2i medication empagliflozin just before hospital discharge was linked to a reduction in heart chamber thickening and favourable changes in pumping function that reduced the risk of heart failure," said Dr Dwivedi.

The new funding will be used to launch a larger randomised study in a bid to confirm the group's early findings and pave the way for a nationwide trial.

"We're also hopeful this trial can address doctors' concerns about rare side effects of SGLT2i therapy, which appears to have been stopping them using it in hospital patients in the aftermath of heart attack, despite well established blood glucose-lowering benefits and recommendations for its use," Dr Dwivedi explained.

"It's well known that initiation of therapies prior to hospital discharge improves long-term health outcomes for patients and encourages them to stick to their medication regime, so if we can prove this class of drug is safe and effective, it could become one of the mainstays of treatment of heart attack patients with type 2 diabetes.

"There is also increasing interest in using these drugs for type 1 diabetes for managing blood glucose and reducing insulin dosage and we hope our work will also contribute to understanding how that may be best done."

Diabetes Research WA executive director Sheri Westlund said the organisation was thrilled to be supporting this powerful research.

"As those with diabetes are up to four times more likely to die from heart disease than people who don't have diabetes, it's critical we make advances in tackling this, and this project has the potential to do just that," said Ms Westlund.

"We're also particularly proud to be supporting this research as it may have benefits for type 1 and type 2 diabetes, both of which are becoming increasingly common worldwide."

Dr Dwivedi is also the Wesfarmers Professor of Cardiology at The University of Western Australia and the head of the Harry Perkins Institute of Medical Research's Advanced Clinical and Translational Cardiovascular Imaging laboratory.

Other researchers involved in the project include Professor Bu Yeap and Dr Gerry Fegan, endocrinologists at Fiona Stanley Hospital, Assoc Prof Frank Sanfilippo, a cardiovascular epidemiologist at University of WA and Royal Perth Hospital senior pharmacist, and Dr Nick Lan, trainee cardiologist at Fiona Stanley Hospital.

The new study is expected to begin in April 2021.

The Jamie Cripps 2021 Research Grant is named in honour of West Coast Eagle Jamie Cripps.

Jamie, who has type 1 diabetes, is a Diabetes Research WA Ambassador and helped raise the \$60,000 awarded to Dr Dwivedi through the 'Help Crippa Kick Diabetes Research Goals' crowdfunding campaign.

Head to diabetesresearchwa.com.au for more details.

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