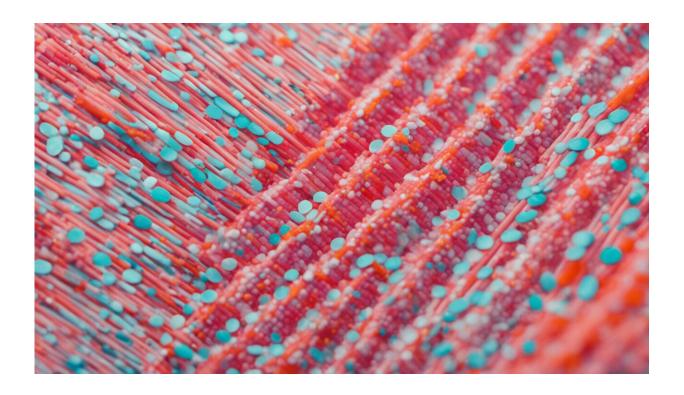


A healthy side effect of diabetes drug

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(Medical Xpress)—New research has shown the promising potential of a glucose-regulating drug to improve the condition of arteries for diabetes sufferers, possibly protecting them against heart attack or stroke.

Dr Anthony Dear and Professor Richard Simpson from Monash University's Eastern Clinical Research Unit are leading a research team, who for several years have been investigating the beneficial side effect



of the a new glucose-regulating medication.

A pre-clinical study, published in the journal *Diabetes and Vascular Disease Research*, demonstrated potentially beneficial effects of the drug in improving or stabilising diabetic vascular disease.

Dr Dear said the drug's potential was important, as Type 2 diabetics often had poor cardiovascular health.

"As the <u>global epidemic</u> of diabetes escalates, this drug has the potential to offer tremendous help to millions of diabetics worldwide," Dr Dear said.

"Pre-clinical studies suggest the drug may improve <u>vascular health</u> in Type 2 diabetics. We think it may have the potential to reduce heart attacks and strokes in those diabetics whose cardiovascular systems are damaged due to the disease.

"Lots of drugs lower blood sugar but they don't necessarily protect blood vessels."

Dr Dear said the drug was derived from the natural gut hormone, Glucagon-Like Peptide-1 (GLP-1).

"It effectively lowers <u>blood glucose</u> by stimulating <u>insulin release</u> in the body. It is a derivative of a naturally-occurring substance which appears to have receptors for it on the surface of <u>blood vessel cells</u> in addition to the pancreas, suggesting it may also have an effect on <u>blood vessel</u> <u>disease</u>," Dr Dear said.

"We think it may also 'smooth' the surface of <u>vessel walls</u> and make them less sticky and prone to develop 'blockages' - a condition frequently seen in Type 2 diabetics. This would mean that blockages,



often contributing to the cause of heart attacks and strokes, would be less likely to form."

Dr Dear said the drug might have the extra potential to improve some of the challenges experienced by diabetics, including weight loss.

"One of the effects of the drug, and natural hormone from which the drug is derived, is to cause weight loss," Dr Dear said.

"Its benefits outside of lowering blood-sugar levels are conducive to problems that diabetics may have, such as being overweight or accelerated blood vessel disease."

The research is being conducted by the Eastern Clinical Research Unit, Translational Research Division at Monash in collaboration with the University's Department of Pharmacology.

The World Health Organisation reports that more than 347 million people worldwide live with diabetes and around 90 per cent of these cases are Type 2.

More information: dvr.sagepub.com/content/early/ ... 64113481817.full.pdf

Provided by Monash University

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