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Media Statement

WA DIABETES RESEARCH DELIVERS BENEFITS FOR KIDNEY TRANSPLANT PATIENTS

West Australian researchers have shown earlier detection of high blood sugar levels and a new treatment approach can reduce the impact of post-transplant diabetes in patients undergoing kidney transplants.

Nearly half of all people who receive a new kidney will develop post-transplant diabetes mellitus (PTDM), which is sparked by immunosuppressive therapy, within 12 months of surgery.

PTDM is a serious complication of transplantation that can make organ rejection more likely and lead to an increased risk of death, and predisposes patients to health complications linked to diabetes.

Renal physician Dr Aron Chakera said a study of West Australian kidney transplant patients, which was funded with a $75,000 grant from Diabetes Research WA, had shown researchers that using a newer oral anti diabetic drug was very beneficial.

“Instead of using the conventional medications to treat post-transplant diabetes in these patients, we used the newer DPP4 inhibitor linagliptin and found this fresh approach could reduce the long-term risk of impaired blood glucose control,” he said.

A year after their kidney transplant, only 15 per cent of patients who developed post-transplant diabetes mellitus still needed the medication to help manage their blood sugar levels – the other 85 per cent were able to stop the treatment because their beta cell function and insulin resistance were improved to a level that matched patients who did not have PTDM.

“This is an incredibly powerful result that significantly reduces the risk of these people developing diabetes-related complications such as eye disease and nerve damage which tends to be irreversible,” said Dr Chakera.

An earlier phase of the study found fructosamine could be a superior test to the usual HbA1c method to diagnose new onset diabetes earlier in these patients.

The findings were published in the international medical journal *Transplantation**.

Diabetes Research WA executive director Sherl Westlund described the findings as important.

“It’s very exciting to be able to slash the chances of kidney transplant recipients having to live with this form of type 2 diabetes and its potential health challenges and we’re proud to have funded such vital research.”

PTDM is believed to be triggered by increased insulin resistance and reduced insulin secretion, both of which can be side effects of the immunosuppressive drugs given to transplant patients to reduce the chances of their body rejecting their new organ.

DPP4 inhibitors work by promoting insulin secretion from pancreatic beta cells.

Dr Chakera will share further details of his work at Diabetes Research WA’s ‘Explore Diabetes’ Expo on Wednesday July 11 in Wembley.

Further event details are available at www.diabetesresearchwa.com.au

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