

Diabetic kidney damage may start earlier than thought

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(HealthDay)—Kidney damage from diabetes may begin much sooner than previously thought, according to a new study.

Researchers found that higher-than-normal [blood sugar levels](#) associated with prediabetes increase the risk of kidney abnormalities that could lead to [kidney failure](#).

"Our research shows that the pathological process of [kidney injury](#) caused by elevated blood glucose levels starts in prediabetes, well before the onset of diabetes," study author Dr. Toralf Melsom said in a National Kidney Foundation news release. Melsom is an associate professor and senior consultant in the nephrology department at University Hospital of North Norway.

The study involved over 1,300 patients aged 50 to 62 who were followed for a median of 5.6 years. Of those people, 595 had prediabetes when the study began.

Prediabetes affects up to 35 percent of adults—twice as many people as diabetes, the study authors said. About half of those with prediabetes develop diabetes within 10 years. Diabetes is the leading cause of [kidney disease](#) and kidney failure.

After adjusting for certain lifestyle factors and medications, the investigators found that patients with prediabetes had early signs of kidney damage, including high levels of a protein called albumin in their urine.

The kidney problems arise when the body responds to metabolic changes that occur early on due to chronically high blood sugar levels, according to the study published Dec. 29 in the *American Journal of Kidney Diseases*.

Melsom said prediabetes may be a target for early interventions, such as changes in diet and exercise, to prevent [chronic kidney disease](#).

Previous studies were unable to find a consistent link between prediabetes and [kidney damage](#), but the study authors said they used a more precise method of determining how well the kidneys were working.

"It is estimated that more than 470 million people will have prediabetes by 2030," Dr. Jeffrey Berns, president of the National Kidney Foundation, said in the news release. "Studies like this underscore how important it is to identify those with prediabetes so lifestyle changes and physician management can potentially stem declines in kidney function."

More information: The U.S. Centers for Disease Control and Prevention has more about [prediabetes](#).

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