

Is high urinary albumin linked to sub-clinical cardiovascular disease in people with type 2 diabetes?

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Advances in non-invasive imaging have allowed clinicians to assess both the structure and function of coronary arteries. Investigators who

recently used positron emission tomography and computed tomography imaging found that in individuals with type 2 diabetes without any symptoms of cardiovascular disease, elevated albumin in the urine may be linked with sub-clinical coronary artery pathology, including coronary artery microcalcifications.

The research will be presented at [ASN Kidney Week 2023](#) November 1–5.

Among 30 individuals with type 2 diabetes and normal urinary albumin levels and 60 with elevated levels (a condition called albuminuria that indicates [kidney damage](#)), participants with albuminuria had higher microcalcification activity, but not after adjusting for clinical risk factors for [cardiovascular disease](#). Microcalcification activity was positively associated with the extent of albuminuria, and a trend remained after adjustment.

Average myocardial flow reserve (the ability to increase [blood flow](#) in the heart during work) was lower in participants with albuminuria, but not after adjustments. Coronary inflammation activity and coronary artery calcium score were similar between the groups.

"Enhancing the understanding of cardiovascular pathology may in the future help clinicians to identify subpopulations of patients at high risk and provide individualized prevention of cardiovascular complications," said corresponding author Tine Hansen, Ph.D., of Steno Diabetes Center Copenhagen, in Denmark.

More information: Study: Increased Coronary Artery Pathology in Type 2 Diabetes Without Cardiovascular Disease but with Albuminuria

Provided by American Society of Nephrology

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