Research Examines Mechanisms Behind Cognitive Decline in Type 2 Diabetes

Type 2 diabetes has been linked with an increased risk of cognitive dysfunction and dementia, but the underlying mechanisms are uncertain. In a new Diabetic Medicine study, imaging tests revealed that changes in white matter regions of the brain that are indicative of small vessel disease are associated with decreased processing speed (the time it takes a person to do a mental task) in people with Type 2 diabetes. Also, higher blood pressure and worse kidney function were related to worse cognition.

The findings suggest that blood vessels in the brain may be involved in the mechanisms that lead to cognitive decline in individuals with Type 2 diabetes.

“Cognitive dysfunction is an emerging target of complications of diabetes mellitus, and we believe that our results provide some clue into the mechanisms behind its development,” said lead author Dr. Boris Mankovsky, of the National Medical Academy for Postgraduate Education, in Kiev, Ukraine.

Additional Information


About Journal

Diabetic Medicine, the official journal of Diabetes UK, is published monthly simultaneously, in print and online editions.

The journal publishes a range of key information on all clinical aspects of diabetes mellitus, ranging from human genetic studies through clinical physiology and trials to diabetes epidemiology. We do not publish original animal or cell culture studies unless they are part of a study of clinical diabetes involving humans. Categories of publication include research articles, reviews, case reports, editorials, commentaries, and correspondence. All material is peer-reviewed.

We aim to disseminate knowledge about diabetes research with the goal of improving the management of people with diabetes. The journal therefore seeks to provide a forum for the exchange of ideas between clinicians and researchers worldwide. Topics covered are of importance to all healthcare professionals working with people with diabetes, whether in primary care or specialist services.

Surplus generated from the sale of Diabetic Medicine is used by Diabetes UK to know diabetes better and fight diabetes more effectively on behalf of all people affected by and at risk of diabetes as well as their families and carers.

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