

Study shows diabetes tied to higher prevalence of overactive bladder

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Markers of diabetes are positively associated with overactive bladder (OAB), according to a study [published](#) online April 28 in *Frontiers in Endocrinology*.

Qingliu He, from Jinjiang Municipal Hospital in Quanzhou, China, and colleagues used data from six cycles of the U.S. National Health and Nutrition Examination Survey (23,863 participants) to examine the relationship between diabetes and OAB.

The researchers found that [diabetes mellitus](#) participants' OAB prevalence was 77% higher versus those without diabetes. With increasing quartiles of diabetes-related markers, the odds of OAB monotonically increased in three models.

There was a linear association between glycohemoglobin and OAB. The associations between diabetes-related markers (glycohemoglobin, fasting glucose, and insulin) with OAB were significantly mediated by white blood cells (7.23, 8.08, and 17.74%, respectively) and partly mediated by neutrophils (6.58, 9.64, and 17.93%, respectively). Machine learning of the XGBoost model predicted glycohemoglobin is the most important indicator of OAB.

"Our hypothesis based on the analysis results of the association between OAB, diabetes, and [systemic inflammation](#) is that diabetes mellitus may increase OAB risk by promoting systemic inflammation," the authors write.

More information: Qingliu He et al, Diabetes mellitus, systemic inflammation and overactive bladder, *Frontiers in Endocrinology* (2024). [DOI: 10.3389/fendo.2024.1386639](https://doi.org/10.3389/fendo.2024.1386639)

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