

Obstructive sleep apnea, retinopathy linked in diabetes

May 19 2009

The eyes may be the window into the soul, but they may also contain important medical information. According to new research to be presented at the American Thoracic Society's 105th International Conference in San Diego on May 19, patients with diabetes who have retinopathy should also be screened for obstructive sleep apnea (OSA).

"We know from our earlier research that 23 percent of men with type 2 diabetes have OSA and this is under-recognized and under-treated," said Sophie D. West, M.D., of the Oxford Centre for Respiratory Medicine in the United Kingdom, who led the research. "This study suggests that OSA is linked to retinopathy in type 2 diabetes."

The researchers analyzed data from 118 men who had participated in the earlier study on the prevalence of OSA in type 2 diabetes in Oxford, England, and who also had retinal images to review. (All patients with type 2 diabetes in the U.K. are offered annual retinal screening to look for signs of retinopathy.) The images were studied by ophthalmology graders for evidence of retinopathy and the sleep study data was reviewed to determine the presence or absence of OSA.

The researchers found that retinopathy was present in more than half—54 percent—of those who had OSA, compared to fewer than a third—31 percent—of those without OSA, independent of the effects of [glucose](#) control, age, [body mass index](#), high blood pressure and the duration of the diabetes. This was statistically significant.

"These results suggest an association between OSA and retinopathy that should be further investigated," said Dr. West. "While the study only analyzed data from men, there is no reason to believe that gender would play a role in the results."

There has been very little work previously regarding the relationship between OSA and retinopathy. Previous studies have found strong links between poor glucose control and high blood pressure with retinopathy and these have been the main areas upon which treatment has been targeted in diabetes in order to prevent retinopathy from developing and to delay its progression. However, in this study, OSA had a far stronger relationship with retinopathy than did glucose control or high [blood pressure](#).

"While there is clearly more research to be done, there is an immediate implication to consider," said Dr. West. "Our message would be for doctors and nurses who see patients with [type 2 diabetes](#) to consider whether they could have OSA and whether they should therefore be referred for a sleep study."

Symptoms of possible OSA include snoring, apneas (stopping breathing) and daytime sleepiness. "Future research will try to determine whether the treatment for OSA, that is continuous positive airway pressure (CPAP), can delay the development or progression of retinopathy, associated with [diabetes](#)."

Source: American Thoracic Society ([news](#) : [web](#))

Citation: Obstructive sleep apnea, retinopathy linked in diabetes (2009, May 19) retrieved 19 April 2024 from <https://medicalxpress.com/news/2009-05-obstructive-apnea-retinopathy-linked-diabetes.html>

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