



Diabetes is no manifest risk factor for developing primary open-angle glaucoma

The Science behind the Tip

There has been a widely held belief that diabetes increases the risk of developing primary open-angle glaucoma (POAG). However, an important selection bias in early studies may have accounted for the perceived association of these conditions. Diabetics are more likely to have been examined by an ophthalmologist, thus increasing the likelihood that their glaucoma would be detected¹.

The large *Baltimore Eye Survey*, a population-based study of 5.308 subjects, was unable to show a higher prevalence of POAG among diabetics¹. The *Ocular Hypertension Treatment Study (OHTS)* of 1.636 ocular hypertensive (OH) subjects originally even found that diabetes is protective against the development of POAG². This counterintuitive finding is however now considered unreliable³ as the study did not verify the self-report of diabetes and it excluded patients with diabetic retinopathy. A study of a smaller group of high-risk OH subjects with a longer follow-up could not identify diabetes as a risk factor for developing POAG either⁴. And the recent *Rotterdam Study* is also in line with this⁵.

Overall, modern investigations found no detectable effect of diabetes on risk of developing POAG.

References

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4. Bengtsson B, Heijl A. A long-term prospective study of risk factors for glaucomatous visual field loss in patients with ocular hypertension. *J Glaucoma*. 2005;14:135-8.
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