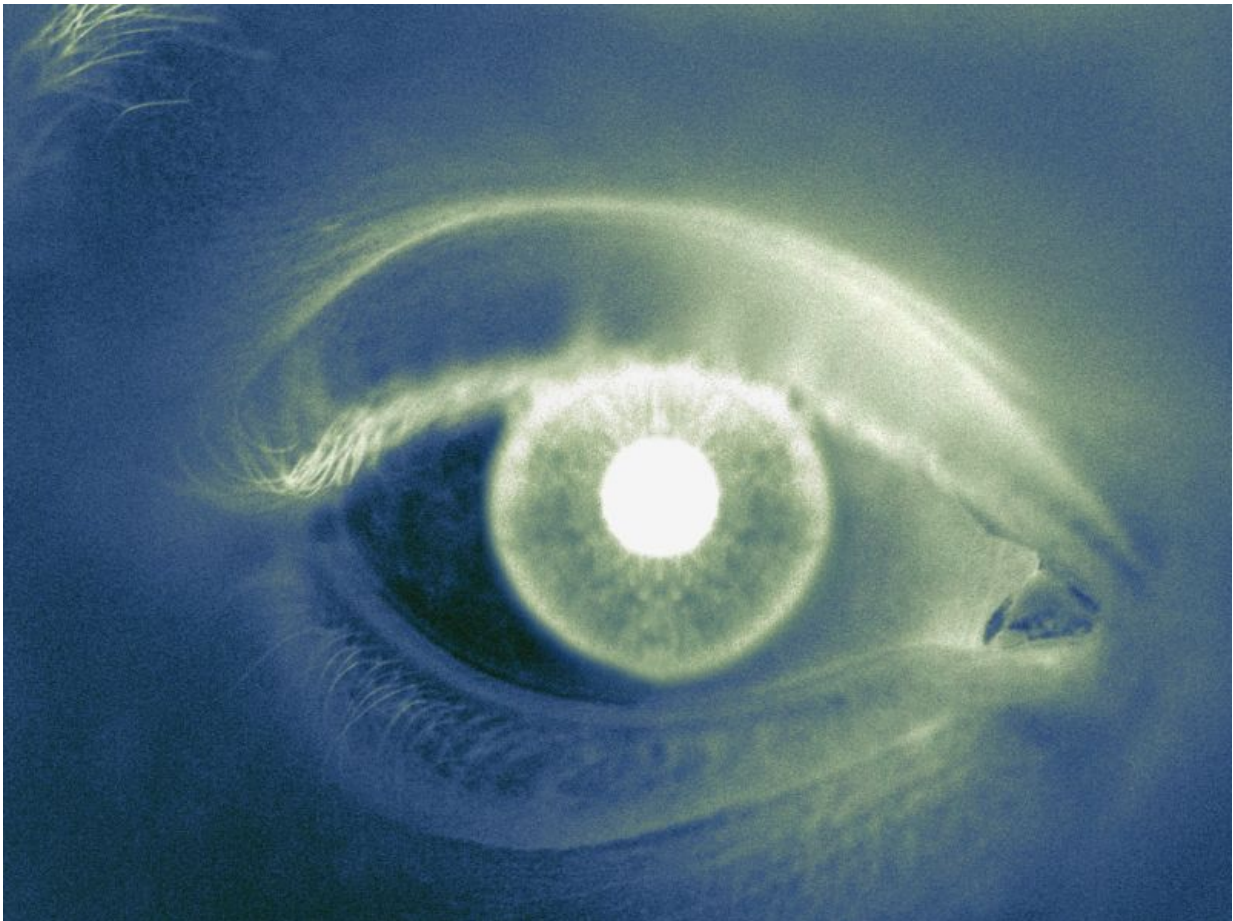


Total retinal blood flow lower in diabetic macular edema

February 13 2017



(HealthDay)—Total retinal blood flow (TRBF) is significantly lower in

eyes of patients with diabetic macular edema (DME), according to a study published online Feb. 9 in *JAMA Ophthalmology*.

ByungKun Lee, from the Massachusetts Institute of Technology in Cambridge, and colleagues conducted a cross-sectional study involving 41 eyes with [diabetic retinopathy](#) (DR) from 31 [patients](#) with diabetes, 20 eyes without DR from 11 patients with diabetes, and 16 eyes from 12 healthy age-matched controls. The authors examined TRBF using en face Doppler optical coherence tomography (OCT) raster scans.

The researchers found that the mean TRBF was 28.0, 48.8, and 40.1 $\mu\text{L}/\text{min}$ in the eyes with DME, in the eyes with DR without DME, and in age-matched healthy eyes, respectively. There was no difference in TRBF for eyes with DME that were treated and eyes with DME that were not treated. Regardless of DR severity, the TRBF was consistently low in eyes with DME. The range of TRBF varied from 31.1 to 75.0 $\mu\text{L}/\text{min}$ in eyes with moderate non-proliferative DR but without DME.

"High-speed en face Doppler OCT can measure TRBF in healthy and diabetic eyes," the authors write. "Further longitudinal studies of TRBF in eyes with DR would be helpful to determine whether reduced TRBF is a risk factor for DME."

Several authors disclosed financial ties to the biopharmaceutical and medical technology industries.

More information: [Full Text \(subscription or payment may be required\)](#)

Copyright © 2017 [HealthDay](#). All rights reserved.

Citation: Total retinal blood flow lower in diabetic macular edema (2017, February 13) retrieved

30 January 2023 from <https://medicalxpress.com/news/2017-02-total-retinal-blood-diabetic-macular.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.