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Malfunction of outer retinal barrier and choroid in the occurrence and progression of diabetic macular edema

Țălu S *et al.* Outer retinal barrier and choroid in DME

Ștefan Țălu, Simona Delia Nicoara

Abstract

16
 Diabetic macular edema (DME) is the most common cause of vision loss in diabetic retinopathy, affecting 1 in 15 patients with diabetes mellitus (DM). The disruption of the inner blood-retina barrier (BRB) has been largely investigated and attributed the primary role in the pathogenesis and progression in DME, but there is increasing evidence regarding the role of outer BRB, separating the RPE from the underlying

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Nov 01, 1983 · Abstract. **Retinal** ischemia and **edema** are the two major intraretinal components of **diabetic maculopathy**. Focal **macular edema** is caused by focal leakage from **retinal** microaneurysms and dilated capillary segments; diffuse **edema** is caused by leakage from diffusely dilated **retinal** capillaries throughout the posterior pole.

Cited by: 445 Author: George H. Bresnick

Publish Year: 1983

Mechanisms of macular edema: Beyond the surface ...

<https://www.sciencedirect.com/science/article/pii/S1350946217300757>

Mar 01, 2018 · **Macular edema** consists of intra- or subretinal fluid accumulation in the **macular** region. It occurs during the course of numerous retinal disorders and can cause severe impairment of central vision. Major causes of **macular edema** include **diabetes**, branch and central retinal vein occlusion, choroidal neovascularization, posterior uveitis, postoperative inflammation and central serous ...

Cited by: 148 Author: Alejandra Daruich, Alexandre Matet, Alexan...

Publish Year: 2017

JCI Insight - Diabetic retinopathy: current understanding ...

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Jul 20, 2017 · Treatments for the vision-threatening complications of **diabetic macular edema** (DME) and proliferative **diabetic retinopathy** (PDR) have greatly improved over the past decade. However, additional therapeutic options are needed that take into account pathology associated with vascular, glial, and neuronal components of the **diabetic retina**.

Cited by: 296 Author: Elia J Duh, Jennifer K Sun, Alan W Stitt

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Diabetic retinopathy and diabetic macular oedema pathways ...

<https://www.nature.com/articles/s41433-020-0961-6>

Jun 05, 2020 · The management of **diabetic retinopathy** (DR) has evolved considerably over the past decade, with the availability of new technologies (diagnostic and therapeutic). As such, the existing Royal ...

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Author: Xiao-Li Huang, Yan-Ping Song, Qin Ding,... **Publish Year:** 2019

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Integrity of RPE **barrier** is essential for normal **retinal** function and it is disrupted by hyperglycemia contributing to the pathogenesis of **diabetic macular edema**. Therefore, we assessed whether caspase-...

Cited by: 14 **Author:** Selina Beasley, Mohamed El-Sherbiny, Sylvi...

Publish Year: 2014

[Diabetic macular edema with pachychoroid features | BMC ...](#)

<https://bmcoophthalmol.biomedcentral.com/articles/...>

Oct 02, 2020 · More recently, diffuse and focal **edema** have been described based on the different pathophysiologies of DME development: diffuse **edema** is thought to result from disrupted **retinal** vessel...

Author: Kyungeun Kang, Hyungwoo Lee, Minsu ... **Publish Year:** 2020

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