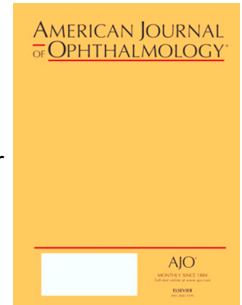


Accepted Manuscript

Macular pigment distribution as prognostic marker for disease progression in macular telangiectasia type 2

Simone Müller, MD, Peter Charbel Issa, MD, DPhil, Tjebo F.C. Heeren, MD, Sarah Thiele, MD, Frank G. Holz, MD, Philipp Herrmann, MD, PhD



PII: S0002-9394(18)30398-2

DOI: [10.1016/j.ajo.2018.07.017](https://doi.org/10.1016/j.ajo.2018.07.017)

Reference: AJOPHT 10586

To appear in: *American Journal of Ophthalmology*

Received Date: 12 April 2018

Revised Date: 12 July 2018

Accepted Date: 15 July 2018

Please cite this article as: Müller S, Issa PC, Heeren TFC, Thiele S, Holz FG, Herrmann P, Macular pigment distribution as prognostic marker for disease progression in macular telangiectasia type 2, *American Journal of Ophthalmology* (2018), doi: 10.1016/j.ajo.2018.07.017.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Purpose: To evaluate macular pigment distribution pattern as a prognostic marker for disease progression in patients with macular telangiectasia type 2 (MacTel).

Design: Retrospective cohort study

Methods: In this single-center study, 90 eyes of 47 patients were analyzed. Macular pigment optical density (MPOD) was measured with dual wavelength fundus autofluorescence. Eyes were graded into MPOD distribution classes 1 to 3 with increasing loss of macular pigment and grading was performed blinded by two independent graders. Best corrected visual acuity, reading acuity, total scotoma size in fundus-controlled perimetry (microperimetry) and break of the ellipsoid zone (EZ) in optical coherence tomography (*en face* measurement) were defined as functional and morphologic outcome parameters and evaluated at baseline and after 60 months.

Results: After a mean review period of 59.6 months (\pm SD 5.2 months), no change between MPOD classes was observed compared to baseline. Morphologic and functional deficits were limited to the area of MPOD loss. At follow up, a significant mean decrease of visual acuity and reading acuity as well as a significant mean increase of scotoma size and EZ break was observed in eyes assigned to MPOD classes 2 and 3, while outcome parameters remained stable in eyes of class 1.

Conclusions: The results indicate that MPOD and its distribution may serve as a prognostic marker for disease progression and functional impairment in patients with MacTel.

Download English Version:

<https://daneshyari.com/en/article/8790435>

Download Persian Version:

<https://daneshyari.com/article/8790435>

[Daneshyari.com](https://daneshyari.com)