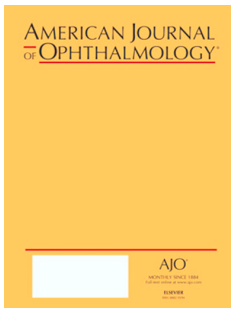
Accepted Manuscript



Microstructure of Parapapillary Atrophy Is Associated with Parapapillary Microvasculature in Myopic Eyes

Mi Sun Sung, Hwan Heo, Sang Woo Park

PII: S0002-9394(18)30254-X

DOI: 10.1016/j.ajo.2018.05.022

Reference: AJOPHT 10534

To appear in: *American Journal of Ophthalmology*

Received Date: 27 March 2018

Revised Date: 16 May 2018

Accepted Date: 23 May 2018

Please cite this article as: Sung MS, Heo H, Park SW, Microstructure of Parapapillary Atrophy Is Associated with Parapapillary Microvasculature in Myopic Eyes, *American Journal of Ophthalmology* (2018), doi: 10.1016/j.ajo.2018.05.022.

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.

ACCEPTED MANUSCRIPT

ABSTRACT

Purpose: To evaluate the clinical characteristics of β-PPA in myopic eyes and determine whether the microstructure of β-PPA is associated with parapapillary microvasculature by using optical coherence tomography (OCT) angiography.

Design: Cross-sectional study

Methods: This study included 80 subjects with myopia with β-PPA. Spherical equivalent (SE) refractive error, axial length, horizontal tilt angle, and the width of β-PPA were evaluated. The microstructure of β-PPA and subfoveal choroidal thickness were evaluated using enhanced-depth imaging OCT and eyes were classified into 3 groups based on the presence of Bruch's membrane (BM), a PPA_{+BM} only group, a PPA_{+BM} and PPA_{-BM} group, and a PPA_{-BM} only group. Superficial and deep parapapillary vessel density was measured using OCT angiography. Clinical characteristics were compared among the groups and linear regression analysis was performed to explore the relationship between the parapapillary microvasculature and microstructure of β-PPA.

Results: The mean axial length and SE refractive error of the participants were 26.47 ± 1.17 mm and -6.28 ± 2.71 diopters, respectively. The PPA_{+BM} only group had a more inferiorly rotated optic disc (P = .025), larger β-PPA (P < .001), and lower superficial and deep parapapillary vessel density (both P < .001) compared with those of the PPA_{-BM} only group. Multivariate linear regression analysis showed that the average PPA_{+BM} width on horizontal scans was significantly associated with superficial and deep parapapillary vessel density (P = .034 and P = .003, respectively).

Conclusions: Significant differences were observed in the microvasculature according to the microstructure of β-PPA. PPA_{+BM} width was closely correlated with superficial and deep parapapillary vessel density. Longitudinal studies are needed to elucidating the role of β-PPA in the development and progression of glaucoma in myopic eyes.

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/8790494

Download Persian Version:

https://daneshyari.com/article/8790494

Daneshyari.com