Characteristics of retinal vessels in surgically closed macular hole: An optical coherence tomography angiography study

Cheolmin Yun[1], Jaemoon Ahn[1], Mingue Kim[1], Ji-taek Kim[2],

Soon-Young Hwang[3], Seong-Woo Kim[1], Jaeryung Oh[1]

[1]Department of Ophthalmology, Korea University College of Medicine, Seoul, Korea

[2]Department of Ophthalmology, Chung-Ang University College of Medicine, Seoul, Korea

[3]Department of Biostatistics, Korea University College of Medicine, Seoul, Korea

ORCID id

Cheolmin Yun: 0000-0002-7438-3660

Jaemoon Ahn: 0000-0003-0336-7898

Ji-taek Kim: 0000-0002-0818-6159

Seong-woo Kim: 0000-0003-0073-5800

Jaeryung Oh: 0000-0002-1036-6562

Corresponding author: Jaeryung Oh, MD, PhD

Department of Ophthalmology, Korea University College of Medicine

126-1 Anam-dong 5-ga, Sungbuk-gu, Seoul, 136-705, Korea

Tel: 82-2-920-5521, Fax: 82-2-924-6820

E-mail: ojr4991@korea.ac.kr

Electronic Supplementary Material 1 Univariate analysis of factors associated with foveal avascular zone (FAZ) area.

Parameters	Superficial capillary plexus		Deep capillary plexus	
	ß	*P*-value	ß	*P*-value
Age (years)	0.150	0.270	0.278	0.152
Sex (Female)	-0.114	0.564	-0.126	0.522
Axial length (mm)	-0.212	0.116	-0.266	0.171
Lens (Phakic)	-0.205	0.296	-0.096	0.628
Preoperative macular hole stage	0.044	0.826	0.113	0.691
Preoperative basal hole diameter (µm)	0.047	0.814	0.072	0.715
Preoperative minimum hole diameter (µm)	0.221	0.259	0.165	0.401
Preoperative hole height (µm)	0.063	0.750	0.119	0.546
Postoperative ELM and EZ status	-0.023	0.909	0.022	0.913

Postoperative mean RT (μm)	0.289	0.135	-0.171	0.383
Postoperative mean GC-IPL thickness (μm)	0.234	0.231	-0..216	0.271
Vascular density of SCP (%)	-0.172	0.382	-0.234	0.230
Vascular density of DCP (%)	0.045	0.821	-0.098	0.713
Horizontal AI^{T} of retina	-0.101	0.607	-0.164	0.405
Vertical AI^{T} of retina	-0.037	0.852	0.308	0.111
Horizontal AI^{T} of GCIPL	-0.216	0.269	-0.182	0.353
Vertical AI^{T} of GCIPL	0.304	0.116	0.174	0.200
Horizontal AI^{VD} of SCP	-0.269	0.166	0.149	0.451
Vertical AI^{VD} of SCP	0.194	0.152	0.194	0.152
Horizontal AI^{VD} of DCP	0.129	0.664	0.030	0.881
Vertical AI^{VD} of DCP	-0.092	0.500	-0.112	0.572

ELM, external limiting membrane; EZ, ellipsoid zone; RT, retinal thickness; GC-IPL, ganglion cell – inner plexiform layer; SCP, superficial capillary plexus; DCP, deep capillary plexus; AI^{T}, ratio of thickness of superior sectors to that of inferior sectors in vertical asymmetry or ratio of thickness of nasal sectors to that of temporal sectors in horizontal asymmetry; AI^{VD}, ratio of vessel density of superior sectors to that of inferior sectors in vertical asymmetry or ratio of vessel density of nasal sectors to that of temporal sectors in horizontal asymmetry.