

Novel Classification of Early-stage Systemic Hypertensive Changes Based on OCTA Measurement of Choriocapillaris

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Supplementary Table S1. Normative choriocapillaris vasculature in each ETDRS sector of right eyes

	Fovea	Nasal	Superior	Temporal	Inferior	Total
VD (%)	43.1 ± 3.0	42.1 ± 2.3	42.0 ± 1.8	44.0 ± 2.2	42.8 ± 1.9	42.9 ± 1.1
VL (mm / mm ²)	21.3 ± 1.5	22.4 ± 1.5	22.7 ± 1.3	23.2 ± 1.4	22.9 ± 1.3	22.4 ± 1.1
VDI (µm)	20.2 ± 1.1	18.8 ± 0.9	18.5 ± 0.8	19.2 ± 0.8	18.7 ± 0.9	19.0 ± 0.7

VD: vessel density, VL: vessel length, VDI: vessel diameter index

Supplementary Table S2. Normative vessel density in right and left eye

	Fovea	Nasal	Superior	Temporal	Inferior	Total
All						
Right eye	43.4 ± 3.1	42.4 ± 2.5	42.0 ± 1.8	44.4 ± 1.9	42.7 ± 2.1	43.0 ± 2.1
Left eye	43.8 ± 3.0	44.4 ± 1.9	42.5 ± 1.9	43.5 ± 1.9	43.0 ± 1.9	43.4 ± 1.9
P value	0.47	<0.001	0.25	0.0096	0.39	0.068
Male						
Right eye	42.7 ± 3.3	42.6 ± 2.4	42.1 ± 1.9	44.3 ± 1.9	42.3 ± 2.3	42.9 ± 1.2
Left eye	43.2 ± 2.7	44.5 ± 1.9	42.3 ± 1.8	43.4 ± 2.3	42.9 ± 1.9	43.2 ± 0.9
P value	0.43	0.0066	0.81	0.045	0.37	0.26
Female						
Right eye	44.1 ± 2.9	42.3 ± 2.6	41.9 ± 1.8	44.5 ± 1.9	43.1 ± 2.0	43.1 ± 1.1
Left eye	44.4 ± 3.2	43.2 ± 1.9	42.6 ± 1.9	43.5 ± 1.9	43.2 ± 1.9	43.5 ± 1.0
P value	0.73	0.0053	0.16	0.046	0.62	0.16

Statistically analyzed by Mann-Whitney *U* test

Supplementary Table S3. Normative vessel length in right and left eye and classification into male and female.

	Fovea	Nasal	Superior	Temporal	Inferior	Total
All						
Right eye	21.3 ± 1.3	22.4 ± 1.8	22.5 ± 1.4	23.0 ± 1.4	22.7 ± 1.5	22.5 ± 1.2
Left eye	21.7 ± 1.5	23.5 ± 1.3	23.1 ± 1.7	23.1 ± 1.5	23.0 ± 1.2	23.0 ± 1.2
P value	0.21	0.0017	0.051	0.73	0.12	0.031
Male						
Right eye	21.1 ± 1.3	22.7 ± 1.5	22.4 ± 1.4	22.7 ± 1.3	22.5 ± 1.4	22.4 ± 1.1
Left eye	21.5 ± 1.4	23.1 ± 1.3	22.8 ± 1.2	23.0 ± 1.6	22.8 ± 1.3	22.7 ± 1.1
P value	0.47	0.33	0.37	0.62	0.37	0.31
Female						
Right eye	21.4 ± 1.4	22.1 ± 1.9	22.5 ± 1.5	23.2 ± 1.4	22.8 ± 1.6	22.5 ± 1.3
Left eye	21.9 ± 1.5	23.8 ± 1.3	23.3 ± 1.7	23.1 ± 1.8	23.3 ± 1.7	23.2 ± 1.3
P value	0.30	0.0017	0.069	0.90	0.21	0.058

Statistically analyzed by Mann-Whitney *U* test

Supplementary Table S4. Normative vessel diameter index in right and left eye and classification into male and female.

	Fovea	Nasal	Superior	Temporal	Inferior	Total
All						
Right eye	20.4 ± 1.2	19.0 ± 1.0	18.7 ± 1.0	19.3 ± 0.8	18.9 ± 1.0	19.1 ± 0.7
Left eye	20.3 ± 1.3	19.0 ± 0.9	18.5 ± 0.9	18.9 ± 1.0	18.7 ± 1.1	18.9 ± 0.8
P value	0.51	0.81	0.16	0.032	0.22	0.049
Male						
Right eye	20.2 ± 1.1	18.8 ± 0.8	18.7 ± 1.0	19.5 ± 0.9	18.8 ± 0.8	19.1 ± 0.6
Left eye	20.2 ± 1.3	19.3 ± 0.7	18.6 ± 0.9	18.9 ± 0.9	18.8 ± 0.8	19.0 ± 0.7
P value	0.78	0.07	0.47	0.022	0.89	0.57
Female						
Right eye	20.6 ± 1.3	19.2 ± 1.1	18.6 ± 1.0	19.2 ± 0.8	18.9 ± 1.1	19.2 ± 0.8
Left eye	20.3 ± 1.2	18.7 ± 1.0	18.3 ± 0.9	18.9 ± 1.2	18.6 ± 1.2	18.8 ± 0.9
P value	0.57	0.06	0.25	0.046	0.13	0.036

Statistically analyzed by non-repeated measures ANOVA

Supplementary Table S5. Outcomes of choriocapillaris vasculature in the three groups

	Fovea	Nasal	Superior	Temporal	Inferior	Total
Vessel density						
Grade 0	44.0 ± 2.5	42.6 ± 1.9	42.0 ± 1.7	44.6 ± 1.9	42.8 ± 1.8	43.1 ± 0.9
Grade 1	42.5 ± 2.9	41.9 ± 2.8	42.0 ± 1.8	43.9 ± 2.7	42.2 ± 3.1	42.5 ± 1.4
Grade 2	40.8 ± 3.6	38.3 ± 4.3	41.5 ± 2.2	42.7 ± 3.2	42.0 ± 2.3	41.1 ± 1.7
P value [#]	<0.001	<0.001	0.29	0.0027	0.066	<0.001
Difference between grade						
Grade0/Grade1	**					**
Grade0/Grade2	**	**		*		**
Grade1/Grade2	*	**				**
Vessel length						
Grade 0	21.7 ± 1.3	22.7 ± 1.4	22.9 ± 1.3	23.4 ± 1.3	23.0 ± 1.2	22.9 ± 1.1
Grade 1	21.2 ± 1.7	22.5 ± 1.6	22.6 ± 1.2	23.0 ± 1.4	22.9 ± 1.4	22.6 ± 1.1
Grade 2	19.5 ± 2.2	21.1 ± 1.6	21.9 ± 0.8	21.4 ± 1.7	22.1 ± 1.0	21.4 ± 1.2
P value [#]	<0.001	<0.001	0.014	<0.001	0.033	<0.001
Difference between grade						
Grade0/Grade1	*					
Grade0/Grade2	**	**	*	**		**
Grade1/Grade2	**	**		**		**
Vessel diameter index						
Grade 0	20.3 ± 1.1	18.8 ± 0.8	18.4 ± 0.8	19.1 ± 0.8	18.7 ± 1.1	18.9 ± 0.7
Grade 1	20.1 ± 0.9	18.7 ± 0.7	18.6 ± 0.9	19.1 ± 0.7	18.5 ± 1.4	18.9 ± 0.7
Grade 2	21.0 ± 1.4	18.2 ± 1.7	19.0 ± 1.1	19.9 ± 1.1	19.0 ± 0.8	19.2 ± 0.6
P value [#]	0.027	0.051	0.010	0.001	0.23	0.12
Difference between grade						
Grade0/Grade1						
Grade0/Grade2	*			**		
Grade1/Grade2	*		*	**		

[#]: analyzed between the 3 groups by non-repeated measures ANOVA, *: P < 0.05 **: P < 0.01 by SNK test.