Supplemental Table 1. Age- and sex- specific proportion and cup-to-disc ratio (CDR) class in this study.

CD1; 0≦VCDR <0.3, CD2; 0.3≦VCDR<0.6, CD3; 0.6≦VCDR<0.7, CD4;0.7≦VCDR <0.9, CD5;0.9≦VCDR

	Number of right eye in each cup-to-disc ratio (CDR) class (%)									
	Male					Female				
Age group	40-49	50-59	60-69	≥70	all ages	40-49	50-59	60-69	≥70	all ages
CD1	120 (45.8)	128 (39.0)	134 (47.7)	103 (38.6)	485 (42.6)	152 (51.8)	125 (45.6)	121 (43.7)	113 (43.6)	511 (46.0)
CD2	129 (49.2)	184 (56.2)	129 (45.9)	123 (46.0)	565 (49.6)	135 (46.1)	135 (49.3)	124 (44.8)	116 (44.8)	510 (45.9)
CD3	11 (4.2)	12 (3.7)	13 (4.6)	25 (9.4)	61 (5.4)	5 (1.7)	12 (4.4)	20 (7.2)	16 (6.2)	53 (4.8)
CD4	2 (0.8)	4 (1.2)	5 (1.8)	15 (5.6)	26 (2.3)	1 (0.3)	2 (0.7)	11 (4.0)	14 (5.4)	28 (2.5)
CD5	0 (0)	0 (0)	0 (0)	1 (0.4)	1 (0.1)	0 (0)	0 (0)	1 (0.4)	0 (0)	1 (0.1)

Supplemental Table 2. The correlation between lesions other than basal ganglia and VCDR.

Brain infarct lesions	*F* value	*P* value
Thalamus	0.88	0.349
Cerebellar white matter	0.30	0.584
Cerebellar gray matter	0.34	0.560
Paralateral ventricle	0.38	0.539
Cerebral white matter	2.60	0.107
Cerebral gray matter	0.0	0.992
Mesencephalon	-	-
Pons	2.00	0.158

Supplemental Table 3. Age- and sex- specific proportion and grades of basal ganglia lesions in this study participants with head MRI (n = 2,239).

Cochran-Mantel-Haenszel statistic

	Number of basal ganglia lesion (%)									
	Male					Female				
Age group	40-49	50-59	60-69	≥70	all ages	40-49	50-59	60-69	≥70	all ages
Grade 0	257 (99.6)	314 (96.9)	252 (91.0)	203 (75.8)	1,026 (91.0)	291 (99.7)	267 (97.8)	272 (98.2)	240 (88.9)	1,070 (96.2)
Grade I	1 (0.4)	10 (3.1)	10 (3.6)	40 (14.9)	61 (5.4)	1 (0.3)	6 (2.2)	3 (1.1)	23 (8.5)	33 (3.0)
Grade II	0 (0)	0 (0)	15 (5.4)	25 (9.3)	40 (3.6)	0 (0)	0 (0)	2 (0.7)	7 (2.6)	9 (0.8)
	$p < 0.0001$					$p < 0.0001$				

Supplemental Table 4. The relationship between vertical cup-to-disc ratio and adjusted valuables in general linear mixed model analysis after adjusted for age, sex, optic disc area, systolic blood pressure, diastolic blood pressure, body mass index, central corneal thickness, and previous cataract surgery.

Adjusted variables	*F* value	*P* value	β (SE)
Body mass index	7.36	0.0068	-0.0034 (0.0013)
Central corneal thickness	5.88	0.0155	-0.2815 (0.1161)

The parameter estimates for VCDR were -0.0034 per 1kg/m^2 (Body mass index) and -0.2815 per 1mm (Central corneal thickness).