Superior segmental optic hypoplasia (SSOH)-like changes of the optic disc induced by transient ocular hypertension
Morio Ueno¹, Miho Sasaki¹, Kazuichi Maruyama¹, Yoko Ikeda¹, Kazuhiko Mori¹, Shigeru Kinoshita¹
¹Department of Ophthalmology, Kyoto Prefectural University of Medicine, Kyoto - Japan

Purpose: To report a case of a superior segmental optic hypoplasia (SSOH)-like change in the optic disc induced by transient ocular hypertension.

Methods: To report the case of a 20-year-old female with an SSOH-like change of her optic disc induced by transient ocular hypertension.

Results: The patient presented complaining of blurred vision in her left eye. Upon examination, intraocular pressure (IOP) in her right eye and left eye were 50 mmHg and 59 mmHg, respectively. Fundus examination of her left eye revealed redness of the optic disc. The size and shape of both optic discs were found to be quite normal. The disc-macula to disc-diameter ratios in her right and left eye were 2.77 and 2.86, respectively, and the cup-to-disc ratio in each eye was 0.33. There was no abnormality in each angle without high insertion of the iris. No significant changes were detected in visual acuity or visual field tests. Trabeculotomy was performed and efficiently reduced the IOP in both eyes. However, automated visual field testing of her left eye revealed an inferior visual field defect 3 months after onset. The defect was wedge shaped and oriented to the blind spot. The nerve fiber layer defect and narrow inferior neural rim of the optic disc were consistent with the visual field defect. The optic disc appearance changed at the superior entrance of the central retinal artery and superior scleral halo. Postoperatively, there was no incremental change of IOP or progression of visual field defect and no morphological change of the optic disc.

Conclusions: Transient ocular hypertension with redness of the optic disc has the potential to develop an SSOH-like change in the disc.