Conflict of Interest

No potential conflict of interest relevant to this article was reported.

References

- Do JR, Oh JH, Chuck RS, Park CY. Transient corneal edema is a predictive factor for pseudophakic cystoid macular edema after uncomplicated cataract surgery. Korean J Ophthalmol 2015;29:14-22.
- Tao A, Chen Z, Shao Y, et al. Phacoemulsification induced transient swelling of corneal Descemet's Endothelium Complex imaged with ultra-high resolution optical coherence tomography. *PLoS One* 2013;8:e80986.

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A Case of Sympathetic Ophthalmia after 23-Gauge Transconjunctival Sutureless Vitrectomy

Dear Editor.

Sympathetic ophthalmia (SO), a bilateral granulomatous panuveitis, is a rare condition that can occur after a penetrating eye injury or intraocular surgery [1]. Although the risk of SO following conventional 20-gauge vitrectomy has previously been suggested [1], there are only two reported cases of SO following transconjunctival sutureless vitrectomy (TSV) [2,3]. We present a case of SO after 23-gauge TSV.

A 45-year-old Korean man presented with blurred vision in his left eye. His best-corrected visual acuity was 0.8 in the right eye and 0.4 in the left eye, and the corresponding intraocular pressures were 13 and 15 mmHg, respectively. Anterior segment slit-lamp examination showed tobacco dust in the anterior vitreous cavity of the left eye. Fundoscopic examination revealed a superotemporal macula-off retinal detachment in the left eye. A large horseshoe tear and several small retinal tears were observed in the area of the detached retina. The patient had no history of ocular trauma or surgery.

The patient underwent 23-gauge TSV under local anesthesia. Endolaser photocoagulation and gas (sulphur hexafluoride) tamponade were used to treat the retinal tears. Postoperative complications, including intraocular pressure increase or decrease, were not observed. One month after

surgery, his best-corrected visual acuity in the left eye was 0.6 and the retina was reattached in the left eye. Two months after surgery, the patient returned with decreased vision and metamorphopsia in his right eye. His best-corrected visual acuity was 0.7 in the right eye and 0.6 in the left eye. Slit-lamp examination showed a moderate inflammatory reaction in the anterior chamber and anterior vitreous of both eyes. Both fundoscopic examination and optical coherence tomography revealed bilateral subretinal fluid, choroidal thickening, and choroidal folds in both eyes (Fig. 1A-1D). Fluorescein angiography showed multiple pinpoint leakages at the level of retinal pigment epithelium in the late phase (Fig. 1E and 1F).

As the patient had bilateral panuveitis, subretinal fluid, and multiple leakages in angiography, we considered either Vogt-Koyanagi-Harada disease (VKH) or SO as a diagnosis. However, he had no systemic symptoms. Furthermore, according to the diagnostic criteria of VKH, it could not be VKH because he had a recent history of ocular surgery. In addition, we did not find any evidence of infection in this patient. As a result, we diagnosed him with SO. The patient was treated with 90 mg of oral prednisolone per day. The subretinal fluid cleared in both eyes following treatment (Fig. 1G and 1H). Oral prednisolone was gradually tapered and continued at a low dose. Nine months after surgery, his best-corrected visual acuity was 0.9 in the right eye and 0.6 in the left eye while taking oral prednisolone 10 mg per day.

SO is a rare bilateral diffuse granulomatous uveitis that occurs a few days to several decades after penetrating accidental or surgical trauma to the eye. Pars plana vitrectomy is a surgical procedure associated with SO [1]. The exact mechanism of SO is not clear, but it is hypothesized that SO

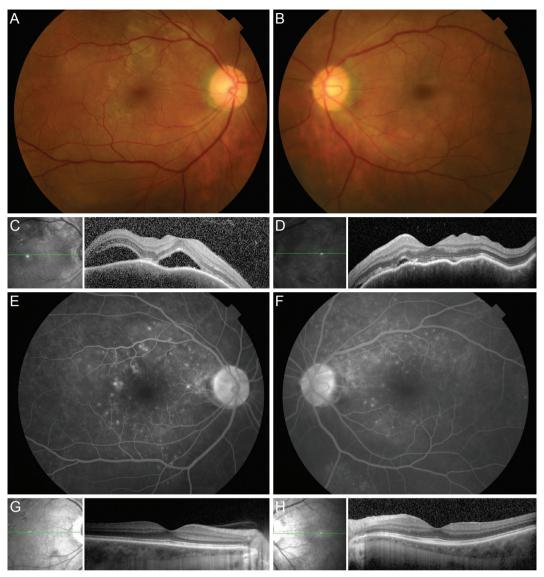


Fig. 1. At the onset of sympathetic ophthalmia, color fundus photography in both eyes showed retinal folds (A,B). Optical coherence tomography in both eyes showed subretinal fluid, choroidal thickening, and choroidal folds (C,D). Fundus fluorescein angiography in both eyes showed multiple pinpoint leakages at the level of retinal pigment epithelium in the late phase (E,F). After treatment with oral prednisolone, optical coherence tomography revealed disappearance of the subretinal fluid (G,H).

results from an autoimmune, inflammatory response against ocular antigens exposed to the lymphatic system in the conjunctiva or orbit [1]. The risks of this exposure are likely due to breakdown of the blood-retinal barrier and subclinical uveal incarceration at wound sites [4].

Recent advancements in microsurgical techniques have led to increased adoption of TSV using 23-gauge or the smaller 25-gauge microinstruments. TSV has many advantages, but it may also be associated with an increased incidence of wound leak [5]. The incidence of wound leak may

cause subclinical uveal incarceration, which results in exposure of ocular antigens.

Cha et al. [2] and Haruta et al. [3] recently reported cases of SO after 23-gauge TSV. However, our case is different from these two cases. Although 23-gauge TSV was performed for the treatment of rhegmatogenous retinal detachment, our case was unrelated to silicone oil tamponade, phacoemulsification, or recurrence of retinal detachment. Any postoperative complications such as hypotony, wound leakages, and hyphema were not observed.

Our case emphasizes that SO can occur after uncomplicated 23-gauge TSV for primary retinal detachment. The mechanism of SO is not clear, but it may be related to persistent uveal wound dehiscence associated with sutureless scleral wounds.

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No potential conflict of interest relevant to this article was reported.

References

- Castiblanco CP, Adelman RA. Sympathetic ophthalmia. Graefes Arch Clin Exp Ophthalmol 2009;247:289-302.
- Cha DM, Woo SJ, Ahn J, Park KH. A case of sympathetic ophthalmia presenting with extraocular symptoms and conjunctival pigmentation after repeated 23-gauge vitrectomy. *Ocul Immunol Inflamm* 2010;18:265-7.
- Haruta M, Mukuno H, Nishijima K, et al. Sympathetic ophthalmia after 23-gauge transconjunctival sutureless vitrectomy. Clin Ophthalmol 2010;4:1347-9.
- Kilmartin DJ, Dick AD, Forrester JV. Sympathetic ophthalmia risk following vitrectomy: should we counsel patients? Br J Ophthalmol 2000;84:448-9.
- Spirn MJ. Comparison of 25, 23 and 20-gauge vitrectomy. *Curr Opin Ophthalmol* 2009;20:195-9.

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Optic Nerve Head Drusen Mimicking Optic Nerve Tumor

Dear Editor.

Optic nerve head drusen (ONHD) are laminated hyaline bodies within the optic nerve head. Spectral-domain optical coherence tomography (SD-OCT) is a noninvasive optical imaging technique that provides high-resolution cross-sectional images of the retina, optic nerve head and retinal nerve fiber layer thickness. This technique thus offers several advantages in the diagnosis of ONHD through the direct visualization of ONHD and the analyses of retinal nerve fiber layer profiles [1-3]. Visual impairment due to ONHD is rare, thus its differential diagnosis from other serious diseases is very important. We found ONHD in a patient referred with diagnosis of optic nerve tumor.

A 45-year-old woman was referred for the evaluation of an optic nerve tumor found during routine visual acuity testing. Fundus examination showed yellowish amorphous material around the right optic disc (Fig. 1A). Fluorescein angiography showed hyperfluorescent staining around the optic disc (Fig. 1B). SD-OCT showed hyper-reflective retinal masses with irregular internal reflectance and posterior shadowing (Fig. 1C), compatible with ONHD.

Differential diagnosis of yellowish amorphous material around the optic disc may include Leber's miliary aneurysm, Coats' disease, retinal cavernous hemangioma or ONHD [4]. Patients with Leber's miliary aneurysm and Coats' disease are typically young men [4]. Leber's miliary aneurysm, Coats' disease or retinal cavernous hemangioma show dilated capillaries and telangiectasia, most commonly located in the mid-periphery of superotemporal quadrants of the retina [4]. These findings are contrary to those in our patient, a middle-aged woman who presented with nasally-located peripapillary masses. In addition, fluorescein angiography tends to reveal leakage in patients with Leber's miliary aneurysm, Coats' disease or retinal cavernous hemangioma [4], in contrast to the staining findings of our patient.

Ultrasonography is considered the gold standard method for the diagnosis of ONHD; however, it definitely has worse resolution than SD-OCT. SD-OCT began a new era in the diagnosis of ONHD [1,2]. An association between older age and visible ONHD has been determined [3]. In agreement with this finding, the present patient was 45 years of age. ONHD can be complicated by hemorrhage [5] but does not usually require treatment.

In conclusion, ONHD should be considered in the presence of peripapillary masses, and SD-OCT can be helpful