

出國報告（出國類別：開會）

2019 日本全球眼部炎症研討會(GOIW)

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摘要

1. 2019 全球眼部炎症研討會(GOIW)於 108 年 6 月 28 日到 6 月 30 日在日本札幌北海道大學會議中心舉辦。
2. 全球眼部炎症研討會(Global Ocular Inflammation Workshop)是兩年一次來自全球各地葡萄膜炎醫師的盛會，今年在日本札幌舉辦，許多國際知名的眼科醫師也共襄盛舉，會中針對數種葡萄膜炎重大疾病的流行病學、診斷、治療進行討論。
3. 在會中發表一篇壁報論文“Experience of sympathetic ophthalmia in a tertiary referral center in southern Taiwan” (交感性眼炎在南台灣一家醫學中心的經驗)，並也進行壁報內容口頭發表，與世界各國與會眼科專家進行交流討論。

關鍵字。

葡萄膜炎、全球眼部炎症研討會

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一、目的

全球眼部炎症研討會(Global Ocular Inflammation Workshop)是兩年一次來自全球各地葡萄膜炎醫師的盛會，今年在日本札幌舉辦，許多國際知名的眼科醫師共襄盛舉，會中針對數種葡萄膜炎重大疾病的流行病學、診斷、治療進行討論。職在會中發表一篇壁報論文，並也進行壁報內容口頭發表，與世界各國與會眼科專家進行交流討論；在此會議中學習到葡萄膜炎最新的流行病學、診斷、與治療趨勢。

二、過程

2019/06/28

今日一早前往位於北海道大學內的會議中心，第一天的會議內容上午為黃斑部病變與糖尿病視網膜病變講座，各國的學者分享關於目前各國在這兩種疾病上治療的現況，包括糖尿病視網膜病變的機轉、IL-6 在黃斑部病變的角色、糖尿病史病變使用抗新生血管藥物治療的成效、最新的影像學檢查儀器、以及糖尿病視網膜病變的篩檢等主題。

下午開始則是大會的重頭戲—各種重要葡萄膜炎疾病的共識工作坊。GOIW 會議最大的特色就是邀請世界各國葡萄膜炎的權威，每兩年共聚一堂討論各種葡萄膜炎疾病的共識，而討論出來的共識便成為全世界治療葡萄膜炎的準則。葡萄膜炎泛指眼睛內葡萄膜的發炎，就發炎的位置上可分類為前葡萄膜炎、中間葡萄膜炎、後葡萄膜炎、全葡萄膜炎；在成因上，葡萄膜炎可因感染疾病、自體免疫疾

病、或不明原因所導致，根據各國文獻，在不同的國家與地區，葡萄膜炎的成因與型態因地域性、遺傳性、環境衛生等因素而有所不同。第一天下午討論的是眼內結核菌感染，在會議中各國學者分享了眼結核菌目前在世界各國診斷與治療的現況，並針對在治療上各國的歧異進行了討論以凝聚共識。

2019/06/29

第二天的會議中，上午討論的內容是貝西氏症(Behcet' s disease)，下午則是討論類肉瘤症(Sarcoidosis)。貝西氏症是種複雜的全身性自體免疫疾病，常合併嚴重的眼內發炎而難以控制，上午會議中，各國專家分享了貝西氏症的治療經驗；下午的會議中則聽到各國學者分享類肉瘤的治療心得，大師們熱烈地討論各種可能面對的情況，並進行舉手表決已達成治療上的共識，讓我收穫良多。

下午四點開始，是 rapid fire 口頭演講的時間，從張貼的海報中，由大會選中幾位發表口頭演講，這次會議中除了張貼海報外，也榮幸獲選發表口頭演講，上台分享本院在交感性眼炎(Sympathetic ophthalmia)近八年來的經驗，並與世界各國醫師交換葡萄膜炎治療上的經驗。

2019/06/30

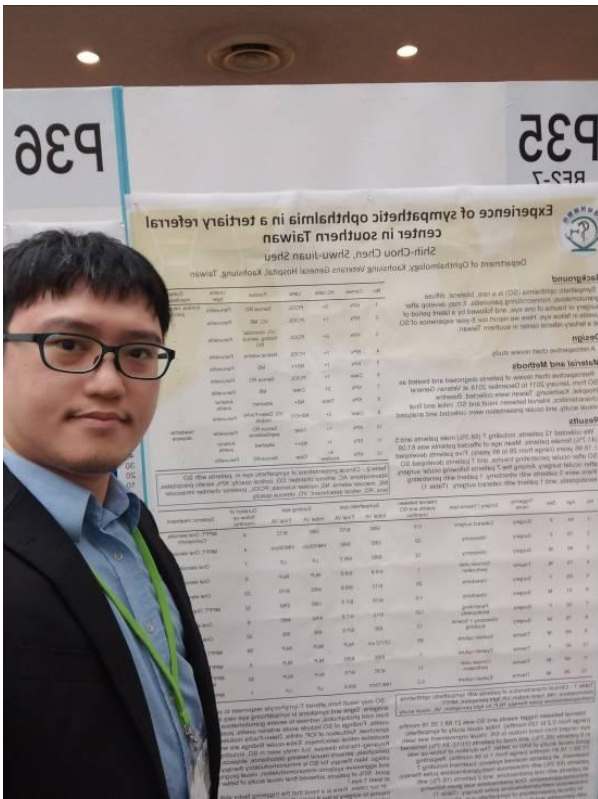
這天是會議的最後一天，聚焦於原田氏症與交感性眼炎的討論，從原田氏症與交感性眼炎過去現今與未來的介紹、各國治療現況，以及美國最新針對原田氏症第一線使用免疫抑制藥物治療研究計畫的初步結果分享，而正好最近的研究項目即放在交感性眼炎此一罕見的葡萄膜炎疾病，因此會議內容與大師們的精采討論讓我真是收穫滿滿。而中午會議結束後，也撤下發表張貼的海報，完成本次的

會議。

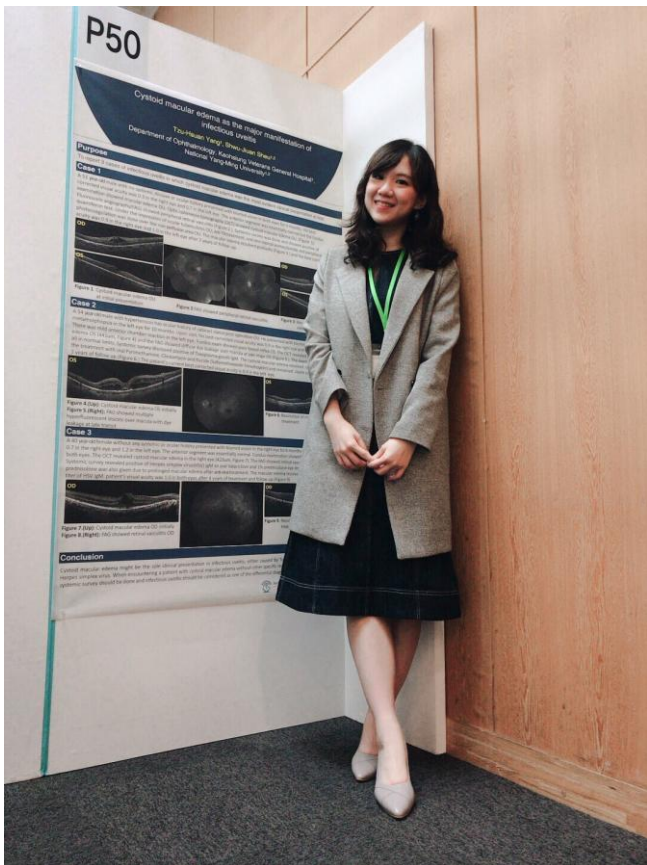
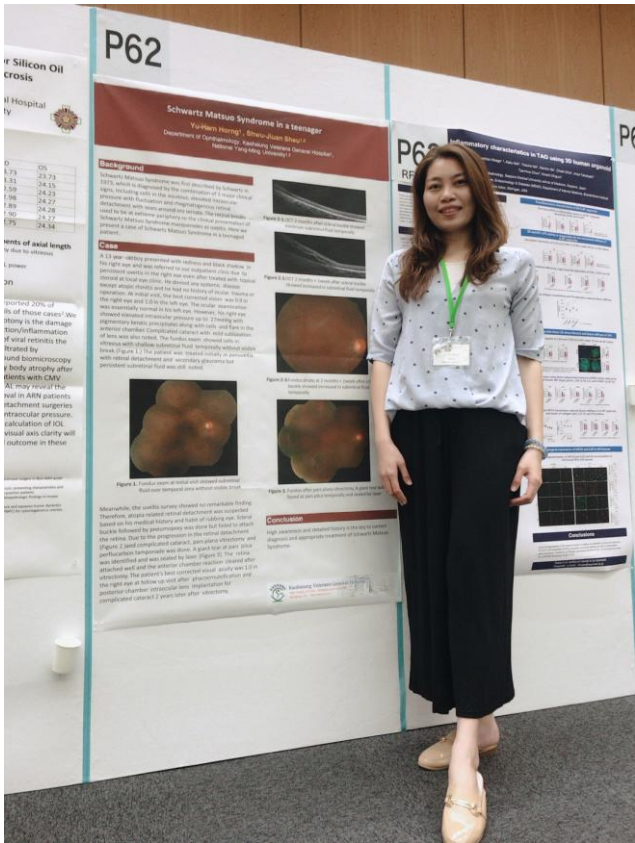
三、心得及建議

本次出國參加札幌的全球眼部炎症研討會國際會議，讓我們收穫良多，特別是今年讓對於年底在高雄即將舉辦的 IOIS 國際葡萄膜炎醫學會年會的演講準備上能有所幫助，葡萄膜炎的診斷與治療經常是十分棘手而困難，許多病患因此而失明，因此感謝醫院提供這個寶貴的機會讓我參加此次的國際會議，能跟來自世界各國的葡萄膜炎專家進行意見的交流以及學習，這對於我們年輕醫師來說是很難得的機會，未來也會將這次會議中所見所聞，以及最新的葡萄膜炎診斷與治療知識，運用在臨床與研究上，增進病患的福祉。特別感謝本科許淑娟教授及吳宗典部主任的大力支持，讓這次的國際會議能夠成行。

附錄









Experience of sympathetic ophthalmia in a tertiary referral center in southern Taiwan

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Background

Sympathetic ophthalmia is a rare, bilateral, diffuse granulomatous, nonnecrotizing panuveitis. It may develop after surgery or trauma of one eye, and followed by a latent period of uveitis in fellow eye. Here we report our 8-year experience of sympathetic ophthalmia at a tertiary referral center in southern Taiwan.

Design

A retrospective chart review study.

Material and Methods

Retrospective chart review of patients diagnosed and treated as SO from January 2011 to December 2018 at Veteran General Hospital, Kaohsiung, Taiwan were collected. Baseline characteristics, interval between insult and SO, initial and final visual acuity, and ocular presentation were collected and analyzed.

Results

We collected 12 patients, including 7 (58.3%) male patients and 5 (41.7%) female patients.

Table 4 : Clinical characteristics of patients with acute post-operative endophthalmitis after cataract surgery received 23-gauge vitrectomy
DM: diabetes mellitus, HTN: hypertension, CAD: coronary artery disease, ESRD: end-stage renal disease

Clinical characteristics of the 12 patients were listed as Table 4. The final visual acuity was no light perception in 1 patient, light perception in 1 patient, between 6/60 and 6/12 in 5 patients, and 6/12 or better in 5 patients. Visual improvement with an increase in visual acuity ≥ 2 Snellen lines was seen in 10 of the 12 patients (83.3%). No retinal detachment was noted during follow-up for at least 6 months.

Table 1 : Characteristics and major predisposing disorders of patients with acute post-operative endophthalmitis after cataract surgery received 23-gauge vitrectomy

No.	Age	Sex	Trauma	Underlying disease	Initial VA	Final VA	Interval between symptoms to vitrectomy (days)	Vitreous culture
1	64	F	OD	DM	CF	6/20	4	Staphylococcus epidermidis
2	79	F	OS	DM, HTN	6/12	6/6	1	-
3	86	M	OD	HTN	CF	6/6.7	0	-
4	79	M	OS	HTN	LP	6/20	4	Staphylococcus epidermidis
5	69	F	OD	-	CF	6/20	3	Staphylococcus epidermidis
6	69	M	OD	-	CF	6/30	3	-
7	51	M	OS	DM, HTN	HM	6/8.6	3	-
8	38	F	OD	-	CF	6/60	2	-
9	76	M	OS	DM, HTN	LP	LP	11	Mold spp.
10	40	F	OS	CAD, ESRD	LP	NLP	4	Citrobacter koseri
11	56	M	OS	HTN	LP	6/10	1	Pseudomonas aeruginosa
12	26	M	OS	DM, HTN	HM	6/8.6	4	-

Variables	Patients with acute post-operative endophthalmitis received 23-gauge vitrectomy (n = 12)
Age (years)	73.08 ± 8.91
Sex (male/female)	8 / 4
Laterality (OD/OS)	5 / 7
Underlying diseases	
Diabetes mellitus	5 (41.67%)
Hypertension	7 (58.33%)
Coronary artery disease	1 (8.33%)
End-stage renal disease	1 (8.33%)

The initial visual acuity was light perception in 4 patients, hand motion in 2 patients, counting fingers in 5 patients, and better than counting fingers in 1 patient. (Table 1) The most common chief complaints were blurred vision (12 patients, 100%), and followed by pain (6 patients, 46.2%).

Table 2 : Initial presentation of patients with acute post-operative endophthalmitis after cataract surgery received 23-gauge vitrectomy

All 12 patients received intravitreal injection (IVI) of antibiotics and 23-gauge vitrectomy, and the average IVI times were 2.17 ± 0.83 times (1-4 times). No intraoperative complications were noted. One patient received evisceration due to uncontrolled infection complicated with panophthalmitis. (Table 3) The interval between initial eye symptoms and vitrectomy was 3.33 ± 2.77 days (0-11 days), and the interval between diagnosis of endophthalmitis and vitrectomy was 1.33 ± 1.37 days (0-4 days).

Table 3 : Treatment of patients with acute post-operative endophthalmitis after cataract surgery received 23-gauge vitrectomy

Operation	Number of eyes	Rate (n = 12)
Intravitreal injection	12	100 %
IVI Ceftazidime 2.25 mg/0.1 mL	12	100 %
IVI Vancomycin 1 mg/0.1 mL	12	100 %
IVI Dexamethasone 0.32 mg/0.08 mL	11	91.67 %
Pars plana vitrectomy (23-gauge)	12	100 %

Discussion

Acute post-operative endophthalmitis after cataract surgery is a rare but sight-threatening complication. In the management of acute post-operative endophthalmitis, early diagnosis and timely treatment may save visual function. In the Endophthalmitis Vitrectomy Study (EVS), vitrectomy surgery was indicated in patients with acute-onset postoperative endophthalmitis presented with visual acuity of light perception, and equivocal in visual acuity of hand motions or better.¹

23-gauge sutureless vitrectomy has rapidly been accepted in vitreoretinal surgery in recent years. The advantages include a shorter surgical time, minimal conjunctival damage, and earlier postoperative recovery. In previous studies, 23-gauge transconjunctival sutureless vitrectomy is an effective surgical technique in the management of vitreoretinal diseases with rare complications and compared favorably with published literature on 20-gauge and 25-gauge surgery.²

In our study, most patients (83.3%) regained their vision after 23-gauge vitrectomy. Early diagnosis and treatment with 23-gauge vitrectomy may provide a generally good visual outcome. Almajroumi et al also reported that 23-gauge transconjunctival sutureless vitrectomy allows the surgeon to meet the same objectives as the 20-gauge technique for the treatment of endophthalmitis.³

In our case series, the interval between diagnosis of endophthalmitis and vitrectomy was only 1.33 ± 1.37 days. Early diagnosis and immediate management were also crucial in the management of acute post-operative endophthalmitis.

Conclusion

In conclusion, compared with traditional 20-gauge vitrectomy, 23-gauge vitrectomy is safe and effective in the management of acute post-operative endophthalmitis after cataract surgery, and provides a shorter surgical time, minimal conjunctival damage, and earlier postoperative recovery.

Reference:

1. Endophthalmitis Vitrectomy Study Group. Results of the Endophthalmitis Vitrectomy Study: a randomized trial of immediate vitrectomy and of intravenous antibiotics for the treatment of postoperative bacterial endophthalmitis. Arch Ophthalmol. 1995;113:1479-1496.
2. Tewari A, Shah GK, Fang A. Visual outcomes with 23-gauge transconjunctival sutureless vitrectomy. Retina. 2006 Feb;26(2):258-62.
3. Almajroumi AM, Combey A, Romanel JP, Chiquet C. 23-gauge transconjunctival sutureless vitrectomy in treatment of post-operative endophthalmitis. Graefes Arch Clin Exp Ophthalmol. 2012 Sep;50(9):1367-71.

Cystoid macular edema as the major manifestation of infectious uveitis

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Purpose

To report 3 cases of infectious uveitis in which cystoid macular edema was the most evident clinical presentation at first.

Case 1

A 51 year-old male with no systemic disease or ocular history presented with blurred vision in both eyes for 6 months. His best corrected visual acuity was 0.3 in the right eye and 0.7 in the left eye. The anterior segment was essentially normal but the fundus examination showed macular edema OU. Optic coherence tomography (OCT) showed cystoid macular edema OU. (Figure 1). Fluorescein angiography(FAG) showed peripheral retinal vasculitis (Figure 2.). Systemic survey was done and showed positive of quantiferon test. Under the impression of ocular tuberculosis OU, anti-TB treatment was conducted by our infectious disease specialist and peripheral photocoagulation was done over the non-perfusion area OU. The macular edema resolved gradually (Figure 3.) and the best corrected visual acuity was 0.9 in the right eye and 1.0 in the left eye after 2 years of follow up.

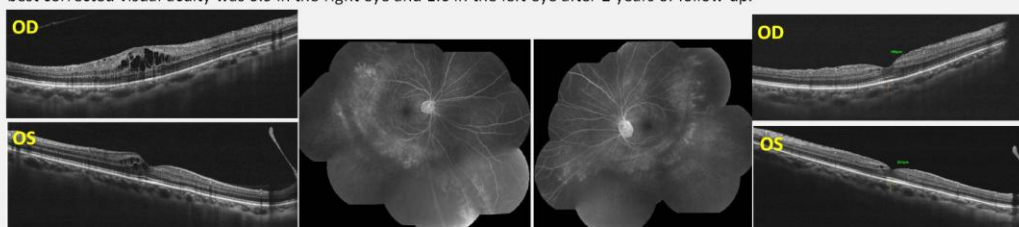


Figure 1. Cystoid macular edema OU at initial presentation

Figure 2: FAG showed peripheral retinal vasculitis

Figure 3: Resolution of macular edema after treatment

Case 2

A 54 year-old male with hypertension has ocular history of cataract status post operation OU. He presented with blurred vision, metamorphopsia in the left eye for 10 months. Upon visit, his best corrected visual acuity was 0.9 in the right eye and 0.5 in the left eye. There was mild anterior chamber reaction in the left eye. Fundus exam showed poor foveal reflex OS. The OCT revealed cystoid macular edema OS (441um, Figure 4) and the FAG showed diffuse dye leakage over macula at late stage OS. (Figure 5.). The exam in the right eye were all in normal limits. Systemic survey disclosed positive of Toxoplasma gondii IgM. The cystoid macular edema resolved rapidly after initiating the treatment with oral Pyrimethamine, Clindamycin and Bacide (Sulfamethoxazole-Trimethoprim) and remained stable condition after nearly 2 years of follow up.(Figure 6.) The patient's current best corrected visual acuity is 0.9 in the left eye.

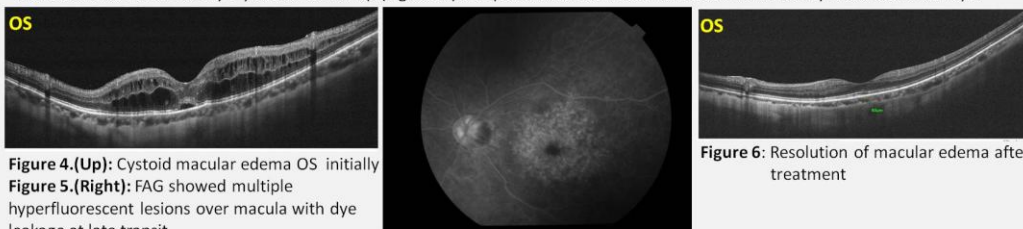


Figure 4.(Up): Cystoid macular edema OS initially

Figure 5.(Right): FAG showed multiple hyperfluorescent lesions over macula with dye leakage at late transit

Figure 6: Resolution of macular edema after treatment

Case 3

A 40 year-old female without any systemic or ocular history presented with blurred vision in the right eye for 6 months. Her visual acuity was 0.7 in the right eye and 1.2 in the left eye. The anterior segment was essentially normal. Fundus examination showed mild vitreous opacity in both eyes. The OCT revealed cystoid macular edema in the right eye.(423um, Figure 7). The FAG showed retinal vasculitis OD. (Figure 8) Systemic survey revealed positive of Herpes simplex virus(HSV) IgM so oral Valaciclovir and 1% prednisolone eye drop were given. Oral prednisolone was also given due to prolonged macular edema after anti-viral treatment. The macular edema resolved gradually with lower titer of HSV IgM. patient's visual acuity was 1.0 in both eyes after 4 years of treatment and follow up.(Figure 9)

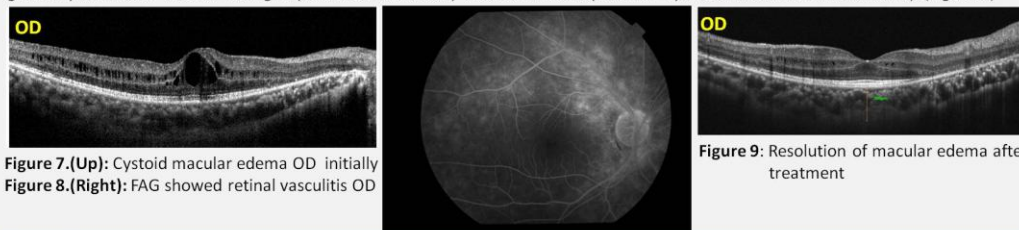


Figure 7.(Up): Cystoid macular edema OD initially

Figure 8.(Right): FAG showed retinal vasculitis OD

Figure 9: Resolution of macular edema after treatment

Conclusion

Cystoid macular edema might be the sole clinical presentation in infectious uveitis, either caused by Tuberculosis, Toxoplasma gondii or Herpes simplex virus. When encountering a patient with cystoid macular edema without other specific reasons, detailed history taking and systemic survey should be done and infectious uveitis should be considered as one of the differential diagnosis.

Schwartz Matsuo Syndrome in a teenager

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Background

Schwartz Matsuo Syndrome was first described by Schwartz in 1973, which is diagnosed by the combination of 3 major clinical signs, including cells in the aqueous, elevated intraocular pressure with fluctuation and rhegmatogenous retinal detachment with tears around ora serrata. The retinal breaks used to be at extreme periphery so the clinical presentation of Schwartz Matsuo Syndrome masquerades as uveitis. Here we present a case of Schwartz Matsuo Syndrome in a teenager patient.

Case

A 13 year-old boy presented with redness and black shadow in his right eye and was referred to our outpatient clinic due to persistent uveitis in the right eye even after treated with topical steroid at local eye clinic. He denied any systemic disease except atopic rhinitis and he had no history of ocular trauma or operation. At initial visit, the best corrected vision was 0.9 in the right eye and 1.0 in the left eye. The ocular examination was essentially normal in his left eye. However, his right eye showed elevated intraocular pressure up to 27mmHg with pigmentary keratic precipitates along with cells and flare in the anterior chamber. Complicated cataract with mild subluxation of lens was also noted. The fundus exam showed cells in vitreous with shallow subretinal fluid temporally without visible break.(Figure 1.) The patient was treated initially as panuveitis with retinal detachment and secondary glaucoma but persistent subretinal fluid was still noted.

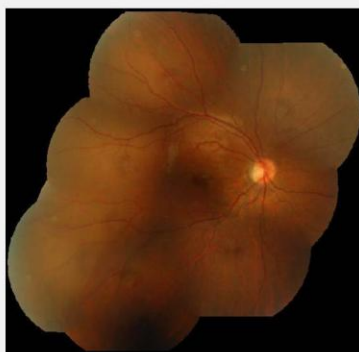


Figure 1. Fundus exam at initial visit showed subretinal fluid over temporal area without visible break

Meanwhile, the uveitis survey showed no remarkable finding. Therefore, atopia related retinal detachment was suspected based on his medical history and habit of rubbing eye. Scleral buckle followed by pneumopexy was done but failed to attach the retina. Due to the progression in the retinal detachment (Figure 2.)and complicated cataract, pars plana vitrectomy and perflucarbon tamponade was done. A giant tear at pars plica was identified and was sealed by laser. (Figure 3). The retina attached well and the anterior chamber reaction cleared after vitrectomy. The patient's best corrected visual acuity was 1.0 in the right eye at follow up visit after phacoemulsification and posterior chamber intraocular lens implantation for complicated cataract 2 years later after vitrectomy.

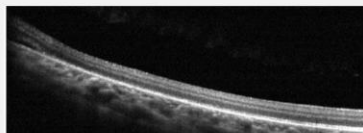


Figure 2-1. OCT 2 months after scleral buckle showed minimum subretinal fluid temporally

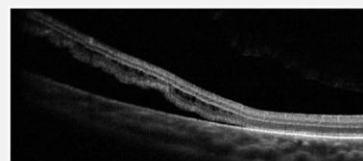


Figure 2-2. OCT 2 months + 1 week after scleral buckle showed increased in subretinal fluid temporally



Figure 2-3. Fundus photo at 2 months + 1 week after scleral buckle showed increased in subretinal fluid temporally

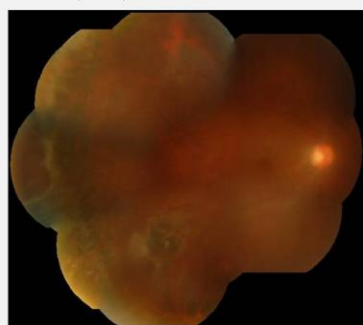


Figure 3. Fundus after pars plana vitrectomy. A giant tear was found at pars plica temporally and sealed by laser

Conclusion

High awareness and detailed history is the key to correct diagnosis and appropriate treatment of Schwartz Matsuo Syndrome.