

Vitreous hemorrhage after trabeculectomy; a case report

[Sinurat V¹](#), Christine R¹

¹Christian University of Indonesia General Hospital, East Jakarta, Indonesia

Introduction

It's a rare case when spontaneous vitreous hemorrhage occurred after trabeculectomy. The hemorrhage may be either due to bleeding from deep scleral suture, retinal break, suprachoroidal hemorrhage, or neovascularization of iris. It may also occur from a coexisting pathology such as diabetic retinopathy.

Case Illustration

A 61-year-old man came with blurred vision and pain on right eye. Right eye's visual acuity was 0.4 with IOP of 37 mmHg. Anterior chamber was deep and no iris neovascularization with implanted IOL. Fundus examination showed CD ratio was 0.9-1.0, with myopia degeneration. Gonioscopy revealed no NVA with occludable angle, PAS (+). Patient was diagnosed with chronic angle-closure glaucoma with moderate NPDR. With maximum medications, IOP target wasn't achieved. Then we performed trabeculectomy with 5-FU on right eye. One day after surgery, IOP was 15 mmHg and visual acuity was 0.3 with diffuse bleb. But four days after surgery, the patient came with sudden blurred vision. Visual acuity HM, IOP was 27 mmHg, flat bleb, and hyperemia. Posterior segment showed vitreous hemorrhage. Triamcinolone was injected 0.1 ml intravitreal. Two weeks after injection, right eye's visual acuity was 0.5, IOP was 14 mmHg, diffuse bleb, and vitreous was clear.

Discussion

Around 5% of patients after glaucoma surgery especially aqueous shunt implantation experienced vitreous hemorrhage. Anti-VEGF could be an option to treat vitreous hemorrhage. Due to the inability to afford anti-VEGF, we used triamcinolone acetonide injection to achieve better visual acuity and clear vitreous.

Conclusion

Intravitreal injection of triamcinolone in vitreous hemorrhage after trabeculectomy may give good results.

References

1. Zhao, Xinyue; Wang, Zhi; Yang, Xiaobo. Management of neovascular glaucoma with intravitreal ranibizumab, panretinal photocoagulation, and subsequent 5-fluorouracil augmented trabeculectomy. *Medicine*. 2017;96(25).
2. Daneshvar R. Anti-VEGF Agents and Glaucoma Filtering Surgery. *J Ophthalmic Vis Res*. 2013;8(2):182-186.
3. Cheng JW, Cheng SW, Wei RL, Lu GC. Anti-vascular endothelial growth factor for control of wound healing in glaucoma surgery. *Cochrane Database of Systematic Reviews*. John Wiley & Sons; 2017.
4. Ghoraba HH, Leila M, Elgouhary SM, Elgemai EE, Abdelfattah HM, Heikal MA. Safety of high-dose intravitreal triamcinolone acetate as low-cost alternative to anti-vascular endothelial growth factor agents in lower-middle-income countries. *Clinical Ophthalmology*. 2018;12:2383–91.
5. Liu L, Xu Y, Huang Z, Wang X. Intravitreal ranibizumab injection combined trabeculectomy versus Ahmed valve surgery in the treatment of neovascular glaucoma: assessment of efficacy and complications. *BMC Ophthalmology*. 2016;16(1):1-7.
6. Artini Widya, Gracia Ajeng, Kekalih A, Oktariana VD, Victor AA, Bani AP. Intravitreal anti-vascular endothelial growth factor injection combined with panretinal photocoagulation for neovascular glaucoma in Indonesian patients with diabetes mellitus: a prospective study. *Med J Indones*. 2019;28(3):258–67.
7. Horsley MB, Kahook MY. Anti-VEGF therapy for glaucoma. *Current Opinion in Ophthalmology*. 2010;21(2):112–117.
8. Slabaugh M, Salim S. Use of Anti-VEGF Agents in Glaucoma Surgery. *Journal of Ophthalmology*. 2017:1–6.



APGC-2022 ABSTRACT BOOK

Supplement Volume 18 • Issue 2
• 2022 • ISSN: 1560-2133

KUGLER
PUBLICATIONS

Asian Journal of
OPHTHALMOLOGY
open access journal  est. 1998

JOIN THE ASIA-PACIFIC GLAUCOMA SOCIETY TODAY!

APGS membership is open to all glaucoma specialists, ophthalmologists, eye care health professionals, doctors with an interest in glaucoma/ophthalmology, researchers in glaucoma, and any incorporated association wishing to support the objectives of the Society.

MEMBERSHIPS STARTING FROM
AUD20

Membership benefits:



Free online access to the Journal of Glaucoma



A registration discount to attend the Asia-Pacific Glaucoma Congress while your membership remains valid



Access to APGS online education platform with recordings of APGS webinar series, APGS Masterclasses and surgical videos



APGS quarterly newsletter



Access to APGS Online Communities to network and advance a specific area of knowledge



Right to participate in the electoral process and the various committees of the APGS



Right to participate in the collaborative activities of the APGS with international affiliate societies and ophthalmic communities



Exciting and valuable professional networking opportunities



Eligibility for awards and recognition

Kick start your membership now! apglaucomasociety.org

Table of Contents

Introduction

Program overview

Welcome by the President

Asia Pacific Glaucoma Congress- Showcasing cutting edge glaucoma research

APGC oral abstract presentations

MSJOC oral abstract presentations

MSJOC OD oral abstract presentations

APGC Film Festival abstract presentations

APGC poster abstract presentations

MSJOC poster abstract presentations

Introduction

The 6th Asia-Pacific Glaucoma Congress in conjunction with the **12th Malaysian Society of Ophthalmology Annual Scientific Meeting (MSO-ASM)** and the **36th Malaysia-Singapore Joint Ophthalmic Congress (MSJOC)** will be held in a hybrid capacity for the first time in Kuala Lumpur, Malaysia, from **4 – 7 August 2022**.

The Asia-Pacific Glaucoma Congress brings together clinicians, scientists, students and other health practitioners from the Ophthalmology field with a focus on Glaucoma. The program provides a platform for delegates to collaborate, share experiences, knowledge and research results whilst also learning about world's best practice and the recent innovations helping us overcome challenges in clinical medicine and surgery.



Prof Ki Ho Park

President, Asia-Pacific Glaucoma Society



Dr Seng Kheong Fang

President-elect, Asia-Pacific Glaucoma Society
APGC 2022 Congress Chair



Prof Tanuj Dada

APGC 2022 Congress Scientific Program
Committee Chair



Prof Liza Sharmini Ahmad Tajudin

APGC 2022 Scientific Program Committee Co-
chair

Program overview

The Asia-Pacific Glaucoma Congress invited submissions for the official program over a broad range of themes including but not limited to basic research and pathogenesis, epidemiology and economic evaluation, glaucoma imaging and diagnosis, glaucoma surgery, laser treatment and medical treatment.

In 2022 abstracts were accepted on behalf of both the Asia-Pacific Glaucoma Congress and the Malaysia-Singapore Joint Ophthalmic Congress (MSJOC), resulting in over 360 abstract submissions being received.

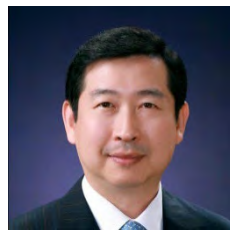
All submissions were peer reviewed to ensure a fair and equitable process and ultimately 28 oral presentations, 3 on-demand oral presentations, 31 film festival presentations and 280 poster presentations were accepted in the official program.

We hope that you find value and ongoing education benefit from this publication of accepted oral, on-demand oral, film festival and poster presentation submissions.

Welcome by the President

Dear Colleagues and Friends,

We have been waiting for four years to have our biennial congress of the Asia Pacific Glaucoma Society (APGS), due to the unexpected outbreak of COVID-19 following the previous (2018) congress in Busan. Even though COVID-19 is still a problem, it is our great pleasure to be able to announce the 6th APGC (2022) in a hybrid on-line/off-line format in conjunction with the 12th Malaysian Society of Ophthalmology Annual Scientific Meeting (MSO-ASM) and the 36th Malaysia-Singapore Joint Ophthalmic Congress (MSJOC).



Glaucoma is one of the leading causes of blindness worldwide, and Asia accounts for 60% of the world's glaucoma cases. So, the role of the APGS is critical to prevention of blindness and maintenance of the quality of life of glaucoma patients. As it was impossible to have a physical congress during the COVID-19 pandemic period, the APGS organized a series of webinars and masterclasses to fulfill the educational needs of the membership. I believe that these online educational platforms have provided great opportunities to those with limited opportunities to travel or join physical meetings.

COVID-19 has changed not only our daily lifestyle but also the pattern of clinical eye care practice. Protecting both patients and healthcare providers became more important. Glaucoma specialists are at a higher risk of air-borne viral infective diseases given our need to measure intraocular pressure and look into the optic disc and anterior segment of the eye. In the context of the pandemic, telemedicine in glaucoma will surely become more common and popular, enabling optic nerve imaging, visual field testing, and intraocular pressure measurement at home or otherwise remotely. It may also make possible real-time communication between

patients and doctors. Artificial intelligence, moreover, may assist doctors' decision-making and help to keep patients better informed before consulting doctors. In APGC 2022's scientific program, you will be able to find topics related to telemedicine and the application of deep learning to glaucoma care. Even after the cessation of the COVID-19 pandemic, there is a high possibility that a new viral disease entity may affect us globally.

However, the importance of in-person meeting cannot be overemphasized. In the shared space of a physical congress, face-to-face and in-depth discussion is possible without the time restrictions of online meetings. We can catch our patients', friends' or colleagues' thoughts and emotions more clearly in-person than in communicating through a monitor and speaker. During the APGC welcome reception or group meeting, we may meet many people more efficiently and get to know each other more closely in addition to gaining new knowledge and information. We may have dinner and coffee or tea together with attendees, just as we do in our daily life. I hope that through this 6th APGC in Kuala Lumpur, we may go back to the time and place we enjoyed in previous congresses.

I thank the organizing committee members and scientific program committee members for their endeavors to make this hybrid APGC2022 congress a success. I also would like to express my gratitude to the executive members of the Malaysian Society of Ophthalmology for their time and effort to make this joint congress more fruitful.

I hope all of you will enjoy the 6th APGC and meet old and new friends.

Ki Ho Park

President of the APGS

Asia Pacific Glaucoma Congress- Showcasing cutting edge glaucoma research

The Asia Pacific Glaucoma Society (APGS) is one of the premier societies for clinician scientists with special interest in the field of glaucoma. This year the society is holding the 6th Asia-Pacific Glaucoma Congress (APGC) with a focus on promoting scientific research and collaboration. The

scientific programme includes lectures by top opinion leaders from across the globe with special symposia of the World Glaucoma Association, American Glaucoma Society, European Glaucoma Society and International Society of Glaucoma Surgery.



The scientific themes of the congress include both glaucoma basic and clinical sciences and broadly cover the following topics : Basic and laboratory science including glaucoma genetics; Epidemiology, quality of life and health economics; Glaucoma imaging and use of artificial intelligence ; medical and laser therapies for glaucoma and surgical modalities including conventional filtering surgery as well as recent advances in minimally invasive glaucoma surgery. There is also a video assisted skill transfer on glaucoma surgery and wet lab on new glaucoma surgical techniques.

The congress invites young researchers from across the globe to submit their original research in the form of structured abstracts. All eligible abstracts then undergo blinded peer review and scoring by at least two APGS committee members and then the scores are averaged. The scoring is based on the originality & clinical significance of the work, the level of evidence , use of appropriate and ethically sound methodology and conclusions based on data presented with statistical validity. We have received 300 scientific abstracts submissions out of

which top scoring 20 abstracts have been selected for oral presentations and 217 as poster presentations. APGS scientific committee will judge the oral presentations and select the best presentations for APGS awards.

In addition, we have invited abstracts for surgical videos to promote skill transfer and to encourage innovations in glaucoma surgery. These are again peer reviewed and selected for viewing during the congress film festival.

This special issue of the Asian Journal of Ophthalmology includes the scientific abstracts included in the congress and promises to be an exciting read, generating new ideas and innovations for alleviating the glaucoma disease burden worldwide. I congratulate the Editors for this initiative and Kugler publications for bringing out this valuable edition in print.

Tanuj Dada MD

APGC 2022 Scientific Programme Committee Chair