

B-2.3



4th APVRS 2009  
November 12-13, 2009, Taipei

WELCOME  
TO TAIPEI



**PROGRAM & ABSTRACT BOOK**



Photographs provided by Tourism Bureau, Ministry of Transportation and Communications



- **Organizer**  
The Ophthalmological Society of Chinese Taiwan
- **Co-organizer**  
Department of Health, Taipei City Government

# Contents

## Preliminaries

- 03 - Forewords
- 05 - Welcome Messages
- 08 - Congress Committees
- 09 - Acknowledgements
- 10 - Invited Speakers

## General

- 14 - Congress Information
- 16 - Program at-a-glance
- 18 - Floor Plan
- 20 - Exhibition
- 21 - Social Programs
- 22 - Tour Program
- 23 - Information on Taiwan

## Scientific Programs

- 24 - Daily Programs
- 24 - • Thursday, November 12, 2009
- 27 - • Friday, November 13, 2009
- 32 - • Poster Sessions
- 34 - Information for Chair, Moderator, Speaker and Presenter

# Congress Committees

## Asia-Pacific VitreoRetinal Society (APVRS)



**President**  
Ian Constable  
(Australia)



**Vice President**  
Xiaoxin Li  
(China)



**Secretary General**  
Dennis Lam  
(Hong Kong)

## Congress Committees

Congress President	Jorn-Hon Liu
Vice Congress President	Chia-Lee Lin
Organizing Committee Chairman	Chung-May Yang
Organizing Committee Co-chairman	Feng-Lih Lee
Scientific Committee Chairman	Wen-Chuan Wu
Scientific Committee Co-chairman	Chi-Chun Lai
Executive Secretary General	Chi-Chun Lai
Treasurer	Lee-Jen Chen

## Steering Committee

Anthony H. Y. Lin, Chih Chin Pan

## Organizing Committee

Shih-Jen Chen, San-Ni Chen, Tun-Lu Chen,  
Yei-Ching Chen, Hin-Yeung Choi, Hsi-Kung Kuo,  
Kwan-Rong Liu, Ching-Yao Tsai, Liang-Yen Wen,  
Chang-Hao Yang

## International Advisory Board

Ian Constable	(Australia)
Xiaoxin Li	(China)
Shibo Tang	(China)
Dennis Lam	(Hong Kong)
Rajvardhan Azad	(India)
Taraprasas Das	(India)
Shigeaki Ohno	(Japan)
Hyung-Woo Kwak	(Korea)
Stanley Chang	(USA)
Ching J. Chen	(USA)
Steve Ryan	(USA)
Mark O.M. Tso	(USA)

## Scientific Committee

Cheng-Jong Chang, Lee-Jen Chen, Hsiao-Ming Chao,  
Jiann-Tong Chen, Cheng-Kuo Cheng, Chang-Ping Lin,  
Shwu-Jiuan Sheu, Yeou-Ping Tsao, Wei-Chi Wu

06

## SILICONE OIL REMOVAL ALONG WITH SECONDARY LENS IMPLANTATION UNDER TOPICAL ANESTHESIA

Gilbert WS Simanjuntak, Jannes F Tan, HHB Mailangkay

Cikini Hospital, Jakarta  
Department of Ophthalmology FK-UKI, Jakarta

**Background:** To remove the silicone oil tamponade along with secondary intra ocular lens (IOL) implantation under topical anesthesia.

**Methods:** Vitrectomized eyes with planned sparing peripheral capsule with silicone oil tamponade later on underwent silicone oil removal. After preoperative thorough fundus examination showed no need for further surgical procedure during oil removal, anterior chamber maintainer was inserted at the inferior limbus contralateral to the superior limbus incision for silicone oil evacuation and IOL insertion. After complete silicone oil removal and synechiolysis done, three piece IOL inserted in the sulcus. Tetracaine 0.5% instilled three times, 60, 30 and 15 minutes before surgery. Surgical technique demonstrated by video.

**Result:** All cases done as one day procedure without additional anesthesia and without patient complain. IOL stable in the position in four eyes. No cases presented corneal edema. The procedure was faster and simpler than trans pars plana silicone oil removal. Each case was done less than 30 minutes.

**Conclusion:** The procedure was easier and produces more 'complete' removal of silicone oil tamponade.

THURSDAY, NOVEMBER 12, 2009

## SILICONE OIL REMOVAL ALONG WITH SECONDARY LENS IMPLANTATION UNDER TOPICAL ANESTHESIA

Gilbert WS Simanjuntak, Jannes F Tan, HHB Mailangkay

Cikini Hospital, Jakarta  
Department of Ophthalmology FK-UKI, Jakarta

**Background:** To remove the silicone oil tamponade along with secondary intra ocular lens (IOL) implantation under topical anesthesia.

**Methods:** Vitrectomized eyes with planned sparing peripheral capsule with silicone oil tamponade later on underwent silicone oil removal. After preoperative thorough fundus examination showed no need for further surgical procedure during oil removal, anterior chamber maintainer was inserted at the inferior limbus contralateral to the superior limbus incision for silicone oil evacuation and IOL insertion. After complete silicone oil removal and synechiolysis done, three piece IOL inserted in the sulcus. Tetracaine 0.5% instilled three times, 60, 30 and 15 minutes before surgery. Surgical technique demonstrated by video.

**Result:** All cases done as one day procedure without additional anesthesia and without patient complain. IOL stable in the position in four eyes. No cases presented corneal edema. The procedure was faster and simpler than trans pars plana silicone oil removal. Each case was done less than 30 minutes.

**Conclusion:** The procedure was easier and produces more 'complete' removal of silicone oil tamponade.

### Introduction

Since the invention of the vitrectomy instrument, the role of silicone oil as a vitreous substitute and retinal tamponade has expanded. More recently, the beneficial effects of silicone oil have been re-confirmed in a multicenter clinical trial by the silicone oil study group.<sup>1-2</sup> Despite the progress in vitreoretinal surgery, the importance of silicone oil as an adjunct for the treatment of complex forms of retinal detachment still has place. Removing silicone oil tamponade after vitrectomy needs caution, due to risk of redetachment. There are several technique in removing the oil, either by active aspiration using the machine for vitrectomy, using high vacuum with syringe, or passive planned transpupillary. We perform vitrectomy with lens extraction and posterior central capsulectomy without intraocular lens (IOL) implantation, the eye left aphakic with oil inside. The plan was to remove the oil transpupillary and implanting the IOL in the

sulcus. We report the result of removing the silicone oil tamponade along with secondary intra ocular lens (IOL) implantation under topical anesthesia.

## **Material and Methods**

Patient was examined thoroughly under slitlamp and indirect ophthalmoscope. Vitrectomized eyes has sparing peripheral capsule with silicone oil tamponade. Before silicone oil removal, patient had not developed any degrees of emulsification. Eye underwent prophylactic 360° laser retinopexy and encircling buckle at the time of primary surgery. After preoperative thorough fundus examination showed no need for further surgical procedure during oil removal, anterior chamber maintainer was inserted at the inferior limbus contralateral to the superior limbus incision for silicone oil evacuation and IOL insertion. Indications for silicone oil removal were tamponade of 2-months before any sign of emulsification.

Through upper limbal incision, oli was removed by pressuring lower limbal lip downward, and increasing the bottle height to increase pressure intraocular. Higher intraocular pressure will enforce oil out of the eye ball. Oil removal was as complete as possible. After complete silicone oil removal, then synechiolysis done, and viscoelastic injected into the space between iris and remain capsule. Three piece IOL inserted in the sulcus. Tetracaine 0.5% instilled three times, 60, 30 and 15 minutes before surgery. Surgical technique demonstrated by video.

At the end of the procedure, topical antibiotics and steroid was instilled for 6 weeks tapering off dose, and oral anti glaucoma for 2 days. Patient were followed up for 3 months.

## **Result**

All cases done as one day procedure without additional anesthesia and without patient complain. IOL stable in the position in four eyes. No cases presented corneal edema. The procedure was faster and simpler than trans pars plana silicone oil removal. Each case was done less than 30 minutes.

The mean duration of SO tamponade was 47 weeks, with a mean follow-up of 66.9 weeks after SOR. Anatomical success after SOR was achieved in 96.73 %.

## **Discussion and Conclusion**

The tamponading force of silicone oil continues until emulsification occurs, therefore, to reduce the side effects it is important to use the most suitable viscosity of silicone oil and to remove it once its function for achieving stable reattachment of the retina has been accomplished.<sup>3</sup>

Low viscosity silicone oils are preferred by some surgeons because of easier surgical handling and removal from the vitreous cavity.<sup>4-6</sup> On the other hand, higher viscosity silicone oils are subject to decreased and delayed emulsification, so that the tamponading force lasts longer, which may provide better tamponade for some complex forms of retinal detachment that need a longer effect.<sup>4</sup> However, silicone oils of various viscosities have similar tamponading effects as long as emulsification of the oil has not occurred.<sup>7</sup>

Removing oil always has some complications such as hyphema, secondary glaucoma, band keratopathy, especially once emulsification occurred. Removing through sclerotomy site always compromised some easiness and completeness of oil removal, compare to transpupillary. We planned to remove the oil while doing previous surgery, by removing the lens and sparring some/peripheral posterior capsule and anterior capsule. To insert the IOL in the sulcus is not difficult to view since the attach anterior and posterior capsule already experiencing opacification, and they appears white and thick. Synechiolysis was done by simply with viscoelastic needle.

At the end of the procedure, the surgeon can completely sure that oil was removed totally by stopping the infusion line and see if any floating oil inside the vitreous cavity. Pain as a consideration due to topical anesthesia is not complaint by patients, as all the procedure involving corneal or limbal. Some surgeon also perform 25gauge vitrectomy transscleral.<sup>8</sup> As conclusion we can say that oil removal and IOL implantation can be done under topical anesthesia, in planned case, as a standard procedure.

## References

1. Silicone study group: Vitrectomy with silicone oil or sulfur hexafluoride gas in eyes with severe proliferative vitreoretinopathy: Results of a randomized clinical trial- Silicone Study, Report No. 1. *Arch Ophthalmol* 1992, 110:770-779.
2. Silicone study group: Vitrectomy with silicone oil or perfluoropropane gas in eyes with severe proliferative vitreoretinopathy: Results of a randomized clinical trial-Silicone Study Report. *Arch Ophthalmol* 1992, 110:780-792.
3. Soheilian M, Mazareei M, Mohammadpour M, Rahmani B. Comparison of silicon oil removal with various viscosities after complex retinal detachment surgery. *BMC Ophthalmol*. 2006 May 31;6:21.
4. Heidenkummer HP, Kampik A, Thierfelder S: Experimental evaluation of in vitro stability of purified polydimethylsiloxanes (silicone oil) in viscosity ranges from 1000 to 5000 centistokes. *Retina* 1992, 12:828-832.
5. Crisp A, De Juan E, Tiedman J: Effect of silicone oil viscosity on emulsification. *Arch Ophthalmol* 1987, 105:546-550.
6. Parrel JM: Silicone oil:physiochemical properties. In *Retina Volume 3*. Edited by: Glaser BM, Michels RG. St. Louis: CV Mosby;1989:261-277.
7. De Juan E Jr, McCuen B, Tiedman J: Intraocular tamponade and surface tension. *Surv Ophthalmol* 1985, 30:47-51.
8. Raju B, Raju NS, Raju AS. 25 gauge vitrectomy under topical anesthesia: a pilot study. *Indian J Ophthalmol*. 2006 Sep;54(3):185-8.



**4th Congress of the Asia-Pacific Vitreo-Retina Society**  
**November 12-13, 2009, Taipei**

*Certificate of Presentation*

This is to certify that

**Gilbert WS Simanjuntak**

has presented the paper titled

**Silicone Oil Removal Along with Secondary Lens Implantation under  
 Topical Anesthesia**

in the

**4th Congress of the Asia-Pacific Vitreo-Retina Society**

November 12-13, 2009, Taipei

*Jorn-Hon Liu*

Jorn-Hon Liu, M.D.

President, 4th APVRS 2009

