The 1st Indonesia Congress on Controversies in Ophthalmology

Controversies in ophthalmology practice in preventing blindness

SYMPOSIUM AND COURSE:
- Infection Immunology Division
- Glaucoma Division
- Cataract and Refractive Surgery Division
- Vitreoretina Division

24 - 26th November 2016
Pangeran Beach Hotel Padang
West Sumatra
### Session 5A

**Infection Immunology: The Clue To The Etiological Diagnosis Of Corneal Ulcer**  
- **Moderator:** Endang Johani, MD  
- **Co-Moderator:** Angga, MD

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>08:30-08:40</td>
<td>How To Find The Clue To The Etiological Diagnosis Of Corneal Ulcer: By Typical Clinical Guessing Or Should Be Microbiological Examinations?</td>
<td>Anang Tribowo, MD</td>
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<tr>
<td>08:40-08:50</td>
<td>Differentiating Corneal Ulcer: Infection or Not Infection</td>
<td>Susi Heriyati, MD</td>
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<tr>
<td>08:50-09:00</td>
<td>Various Clinical Picture Of Peripheral Corneal Ulcers: Moore's Ulcer Or Peripheral Ulcerative Keratitis?</td>
<td>Dina Novita, MD</td>
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<td>09:00-09:10</td>
<td>Discussion</td>
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### Session 5B

**Infection Immunology: Surgical Therapy For Corneal Ulcer**  
- **Moderator:** Prof. Dr. Winarto, MD  
- **Co-Moderator:** Retno Sasanti, MD

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<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>09:20-09:30</td>
<td>Surgical Therapy For Impending And Perforating Corneal Ulcer: Conjunctival Flap, Amnion Membrane Or Fascia Lata/Periostial Graft?</td>
<td>Randi Montana, MD</td>
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<tr>
<td>09:30-09:40</td>
<td>Choice Of Keratoplasty For Corneal Ulcer: Technic, Lamellar Or Penetrating Keratoplasty?</td>
<td>Made Susyanti, MD</td>
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<td>09:40-09:50</td>
<td>Management Of Staphylococcal Keratitis When Vision Is Lost / Still Present: Evisceration Or Cryotherapy?</td>
<td>I Gde Wirastana, MD</td>
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<td>09:50-10:00</td>
<td>Discussion</td>
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### Session 6A

**VitreoRetina: PDR and Diabetic Macular Edema**  
- **Moderator:** Prof. Khalilul Rahman, MD  
- **Co-Moderator:** Firmansyah, MD

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<thead>
<tr>
<th>Time</th>
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<tr>
<td>10:15-10:30</td>
<td>Anti VEGF For DME</td>
<td>Weni Helvinda, MD</td>
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<td>10:30-10:45</td>
<td>Anti VEGF Plus PR</td>
<td>Ramzi Amin, MD</td>
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<td>10:45-11:00</td>
<td>Panel Discussion</td>
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### Session 6B

**VitreoRetina: Surgery for Vitreous Haemorrhage (PDR)**  
- **Moderator:** Prof. Gatau Sunendaro, MD  
- **Co-Moderator:** Nurini Agni, MD

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<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>11:00-11:15</td>
<td>Vitrectomy plus Anti VEGF</td>
<td>Arjati Kusuma, MD</td>
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<tr>
<td>11:15-11:30</td>
<td>Vitrectomy + Laser + Anti VEGF</td>
<td>Gilbert Simnajuntak, MD</td>
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<td>11:30-11:45</td>
<td>Panel Discussion</td>
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<td>11:45-12:00</td>
<td>Shafat Jumat</td>
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### VITREORETINA LUNCH SYMPOSIUM (BAYER)

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<thead>
<tr>
<th>Time</th>
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<th>Speaker</th>
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<tbody>
<tr>
<td>13:00-13:05</td>
<td>Opening by MC and Moderator while Lunch Serving</td>
<td>Rumita Kadarisman, MD</td>
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<tr>
<td>13:05-13:25</td>
<td>Intravitreal AntiVEGF for Diabetic Macular Edema</td>
<td>Eligia, MD</td>
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<td>13:25-13:45</td>
<td>Clinical Trial Review of Different Therapeutic options in Diabetic Macular Edema</td>
<td>Matthew Russel, MD (Australia)</td>
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<td>13:45-14:00</td>
<td>Discussion</td>
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### Session 7

**Glaucoma: Refractory Glaucoma: How to manage**  
- **Moderator:** Dr. Andika Prahasta, MD  
- **Co-Moderator:** Prima Mayasari, MD

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<thead>
<tr>
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<tr>
<td>14:00-14:15</td>
<td>Application Of Mydriatic C: Is it Necessary?</td>
<td>Fitratul Ili, MD</td>
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<td>14:15-14:30</td>
<td>Anti VEGF In Neuveascular Glaucoma: Before Or Combined With Trabeculotomy?</td>
<td>Andika Prahasta, MD</td>
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<tr>
<td>14:30-14:45</td>
<td>Management Of Acute Primary Angle Closure: LPI Or Pharmacological?</td>
<td>Nuttamon Srisaran, MD</td>
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Surgery for Vitreous Hemorrhage (PDR)
Combined Vitrectomy, Laser and Anti VEGF

Gilbert WS Simanjuntak
Department of Ophthalmology FK UKI
SMF IP Mata RS PGI Cikini
Early VH, VA <5/200, ≥1 month are eligible for early pars plana vitrectomy (PPV) (in 1-6 months) or conventional (until macula detach or unclear vitreous >1 year)

- After 2 yrs, good vision gain 25% in early PPV, 15% in conventional
- Type I DM has better outcome than type II
- Approximately 20% of these worsened to no light perception after PPV
- *Delayed* PPV in type II is not recommended

- Improvements in PPV techniques such as endolaser, C3F8 injection, better microscope viewing systems, and earlier vitrectomy
  - only 3% progressed to poor visual outcome (Mason AJO 2005)
PPV for VH PDR : Indications

- Visually significant, non clearing hemorrhage
- Tractional RD involving or threatening macula
  - Combined Tractional-Rhegmatogen RD

*Early PPV should be considered if NV is extensive and rapidly progressive*
PPV- difficulties

- Intraoperative hemorrhage
- Difficult to do fibrovascular membrane dissection (delamination or segmentation)
- Postoperative vitreous hemorrhage (VH)

**TIPS**

*Laser prior to PPV as much as possible (needs clear media, take 2-3 weeks until BV regressed, facilitate MP)*

*Avoid inflamed eye, risk of fragile retina (iatrogenic break, unreleased traction, etc) : PRP*
Anti VEGF injection

- Regressed blood vessel (no need clear media, short effect)
  - Anti-inflammatory (swelling, inflamed vitreous/retina, etc)

PROs

- To decrease intraoperative hemorrhage
- Facilitate fibrovascular membrane dissection, easier separation of FVM from the underlying retina
- Reduce postoperative vitreous hemorrhage (VH) rates

(debateful...)
Meta-analysis IVB Pre PPV

**Comparison: Intraoperative bleeding**

<table>
<thead>
<tr>
<th>Study</th>
<th>PPV n/N</th>
<th>IVB + PPV n/N</th>
<th>OR (random)</th>
<th>Weight %</th>
<th>OR (random)</th>
<th>95% CI</th>
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</thead>
<tbody>
<tr>
<td>Ahmadi et al (5)</td>
<td>17/33</td>
<td>10/35</td>
<td>24.59</td>
<td>100.00</td>
<td>2.66</td>
<td>[0.98, 7.23]</td>
</tr>
<tr>
<td>di Lauro et al (9)</td>
<td>19/24</td>
<td>2/24</td>
<td>19.80</td>
<td>8.85</td>
<td>41.80</td>
<td>[7.26, 240.77]</td>
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<tr>
<td>Rizzo et al (3)</td>
<td>9/11</td>
<td>2/11</td>
<td>17.16</td>
<td>100.00</td>
<td>20.25</td>
<td>[2.32, 176.79]</td>
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<tr>
<td>Yang et al (6)</td>
<td>3/24</td>
<td>2/16</td>
<td>18.75</td>
<td></td>
<td>1.00</td>
<td>[0.15, 6.77]</td>
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<tr>
<td>Yeh et al (1)</td>
<td>17/22</td>
<td>2/21</td>
<td>19.70</td>
<td></td>
<td>32.30</td>
<td>[5.53, 188.79]</td>
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</table>

Total (95% CI): 114 107
Total events: 65 (PPV), 18 (IVB + PPV)

Test for heterogeneity: Chi² = 15.33, df = 4 (P = 0.004), I² = 73.9%
Test for overall effect: Z = 2.95 (P = 0.003)

**Comparison: Frequency of endodiathermy**

<table>
<thead>
<tr>
<th>Study</th>
<th>PPV n/N</th>
<th>IVB + PPV n/N</th>
<th>OR (fixed)</th>
<th>Weight %</th>
<th>OR (fixed)</th>
<th>95% CI</th>
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<td>Rizzo et al (3)</td>
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<td>20.25</td>
<td>[2.32, 176.79]</td>
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<tr>
<td>di Lauro et al (9)</td>
<td>13/24</td>
<td>2/24</td>
<td>71.60</td>
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<td>13.00</td>
<td>[2.48, 68.05]</td>
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</table>

Total (95% CI): 35 35
Total events: 22 (PPV), 4 (IVB + PPV)

Test for heterogeneity: Chi² = 0.10, df = 1 (P = 0.75), I² = 0%
Test for overall effect: Z = 4.02 (P < 0.0001)

Zhao LQ, BJO 2016
IVB Pre PPV versus PPV Alone

- Incidence of intraoperative bleeding and frequency of endodiathermy $p<0.01$
- Less surgical time than the control group ($p=0.003$).
- Shorter reabsorption time of blood ($p=0.04$)
- Incidence of recurrent VH ($p=0.05$)
- Better final best-corrected visual acuity ($p=0.003$)
- Other complications, including final retinal detachment, and reoperation, were statistically insignificant

Zhao LQ, BJO 2016
• The surgical endpoint was the relief of traction on the macula and areas of TRD and a clear vitreous cavity.

• Dose IVB 1.25 mg 2-4 days before PPV
  • early incidences of recurrent VH (<1 week) eligible for PPV
  • Can be detected in the retinal tissue 14 days after intravitreal injection (Chen, Retina 2006)
  • 7-day with 20-day previtrectomy IVB gave similar clinical outcome but more difficult surgery in 20-day group
  • Cikini Hospital : 2.5 mg/0.1 ml + 0.1 ml Dexa 1-10 days before PPV

*IVB Pre, Durante, Postop ?*
PROs and CONs

PROs

- To decrease intraoperative hemorrhage and
- Facilitate fibrovascular membrane dissection
- Reduce postoperative vitreous hemorrhage (VH) rates

CONs

- Concern still exists that IVB may worsen TRD
- May cause the foveal vascular zone enlargement
THANK YOU
Certificate of Presentation

This is to certify that

Gilbert WS Simanjuntak, MD

as SPEAKER

SKP ID: No.51B/ID-WIL-SB/KIX/2016
Speaker: 8, Participant 12, Moderator 2, Committee 1

Head Division of Indonesia Ophthalmology Association

Chairman

Dr. dr. Heksan, Sp.M(K)

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