2018

ASRS GLOBAL TRENDS IN RETINA

Rishi P. Singh, MD
42 societies accepted our invitation; 922 of their members answered the 2018 Global Trends in Retina Survey
GLOBAL TRENDS in Retina

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GLOBAL TRENDS in Retina

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GLOBAL TRENDS in Retina

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Africa/Middle East

Arab African Society of Retina Specialists (AASRS)

Emirates Society of Ophthalmology

Gulf Retina Group

Iranian Vitreoretinal Society

Israel Vitreoretinal Society

The Jordan Vitreoretinal Society

Oman Ophthalmic Society

Saudi Ophthalmological Society

Vitreoretinal Society of Nigeria
Asia/Pacific

Association of Vitreo-Retina Specialists of Sri Lanka
Australian and New Zealand Society of Retinal Specialists
Chinese Ocular Fundus Diseases Society
Indonesia Ophthalmology Association, Vitreoretinal Interest Group
Japanese Retina and Vitreous Society
The Korean Retina Society
Malaysian Society of Ophthalmology
Singapore Society of Ophthalmology, Retina Section
Taiwan Retina Society
The Thai Retina Society
Vitreo Retina Society of India
Central & South America

Argentine Retina and Vitreous Society
Brazilian Retina and Vitreous Society
Central American Retina and Vitreous Society (SCRV)
Colombian Retina and Vitreous Association
Mexican Retina Association
Pan-American Retina & Vitreous Society (PRVS)
Peruvian Society of Ophthalmology
Salvadoran Retina and Vitreous Association
Uruguayan Association of Ophthalmology
Europe

Austrian Ophthalmological Society
British and Eire Association of Vitreoretinal Surgeons (BEAVRS)
Dutch Society of Vitreoretinal Surgery
Dutch Medical Retina Society
EURETINA
European Vitreoretinal Society
French Society of Retina Specialists
Greek Vitreo-Retinal Society (GVRS)
Italian Vitreoretinal Surgery Society
Rosengren Club—Swedish Vitreoretinal Society
Spanish Retina and Vitreous Society (SERV)
Turkish Ophthalmological Society
Ukrainian Alliance of Ophthalmologists
What is your first-line anti-VEGF agent for wet AMD?

Asia/Pacific (n=223)
- Avastin: 30.9%
- Eylea: 41.7%
- Lucentis: 26.0%

Central & South America (n=188)
- Avastin: 22.9%
- Eylea: 47.3%
- Lucentis: 29.3%

Europe (n=298)
- Avastin: 30.0%
- Eylea: 37.2%
- Lucentis: 28.9%

United States (n=740)
- Eylea: 16.4%
- Lucentis: 12.8%
- Avastin: 70.2%
After how many injections do you consider switching anti-VEGF agents due to inadequate response?

- **Africa/Middle East (n=198)**: 91.4%
- **Asia/Pacific (n=223)**: 81.2%
- **Central & South America (n=188)**: 81.9%
- **Europe (n=297)**: 73.7%
- **United States (n=740)**: 78.1%
What treatment would you recommend for a submacular hemorrhage due to AMD, VA = 20/200?

- **Africa/Middle East** (n=197): 37.1% Vitrectomy with t-PA injection, 27.3% Anti-VEGF injection therapy
- **Asia/Pacific** (n=223): 26.9% Pneumatic displacement (in office) with gas injection, 34.5% Anti-VEGF injection therapy
- **Central & South America** (n=187): 20.3% Vitrectomy with t-PA injection, 54.5% Anti-VEGF injection therapy
- **Europe** (n=296): 33.8% Vitrectomy with t-PA injection, 33.4% Anti-VEGF injection therapy
- **United States** (n=743): 21.4% Vitrectomy with t-PA injection, 56.8% Anti-VEGF injection therapy

*t-PA = tissue plasminogen activator*
What are the greatest unmet needs regarding wet-AMD treatment?

- **Africa/Middle East** (n=198)
  - Reduced treatment burden: 34.8%
  - Long-acting/sustained delivery: 79.3%

- **Asia/Pacific** (n=223)
  - Reduced treatment burden: 69.1%
  - Long-acting/sustained delivery: 66.8%

- **Central & South America** (n=188)
  - Reduced treatment burden: 48.4%
  - Long-acting/sustained delivery: 66.5%

- **Europe** (n=294)
  - Reduced treatment burden: 52.7%
  - Long-acting/sustained delivery: 78.9%

- **United States** (n=743)
  - Reduced treatment burden: 73.2%
  - Long-acting/sustained delivery: 56.3%
How would you treat a mildly symptomatic CRVO with minimal thickening on OCT, VA = 20/25?

<table>
<thead>
<tr>
<th>Region</th>
<th>Observation; most cases resolve spontaneously</th>
<th>Immediate anti-VEGF, as most eyes will worsen</th>
<th>Defer treatment until the macular edema or VA worsens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa/Middle East</td>
<td>20.9%</td>
<td>46.4%</td>
<td>30.6%</td>
</tr>
<tr>
<td>(n=196)</td>
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</tr>
<tr>
<td>Asia/Pacific</td>
<td>30.9%</td>
<td>26.0%</td>
<td>30.9%</td>
</tr>
<tr>
<td>(n=223)</td>
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</tr>
<tr>
<td>Central &amp; South America</td>
<td>43.1%</td>
<td>30.3%</td>
<td>25.0%</td>
</tr>
<tr>
<td>(n=188)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>39.0%</td>
<td>27.8%</td>
<td>31.5%</td>
</tr>
<tr>
<td>(n=295)</td>
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<tr>
<td>United States</td>
<td>29.6%</td>
<td>23.6%</td>
<td>42.6%</td>
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<td>(n=792)</td>
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</tbody>
</table>
How will the 6-month DRCR.net Protocol U results affect your management of eyes with DME poorly responsive to ranibizumab?

- **Africa/Middle East (n=197)**
  - 48.2% No change
  - 30.5% More likely to continue anti-VEGF injections prior to switch to corticosteroid
  - 19.8% More likely to switch to corticosteroid earlier over continuing anti-VEGF injections

- **Asia/Pacific (n=222)**
  - 39.6% No change
  - 33.8% More likely to continue anti-VEGF injections prior to switch to corticosteroid
  - 22.5% More likely to switch to corticosteroid earlier over continuing anti-VEGF injections

- **Central & South America (n=187)**
  - 28.3% No change
  - 38.0% More likely to continue anti-VEGF injections prior to switch to corticosteroid
  - 31.6% More likely to switch to corticosteroid earlier over continuing anti-VEGF injections

- **Europe (n=296)**
  - 32.1% No change
  - 36.5% More likely to continue anti-VEGF injections prior to switch to corticosteroid
  - 27.7% More likely to switch to corticosteroid earlier over continuing anti-VEGF injections

- **United States (n=741)**
  - 12.1% More likely to switch to corticosteroid earlier over continuing anti-VEGF injections
  - 36.2% More likely to continue anti-VEGF injections prior to switch to corticosteroid
  - 50.2% No change
How would you manage a 30-year-old type 1 diabetic patient with high-risk PDR, VA = 20/20, and no ME?

<table>
<thead>
<tr>
<th>Region</th>
<th>Complete PRP treatment in 2 or more sessions</th>
<th>Anti-VEGF injection therapy in conjunction with complete PRP treatment in 2 or more sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa/Middle East</td>
<td>51.8%</td>
<td>35.5%</td>
</tr>
<tr>
<td>(n=197)</td>
<td></td>
<td>Anti-VEGF injection therapy in conjunction with complete PRP treatment in 2 or more sessions</td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td>54.3%</td>
<td>29.4%</td>
</tr>
<tr>
<td>(n=221)</td>
<td></td>
<td>Anti-VEGF injection therapy in conjunction with complete PRP treatment in 2 or more sessions</td>
</tr>
<tr>
<td>Central &amp; South America</td>
<td>39.4%</td>
<td>43.1%</td>
</tr>
<tr>
<td>(n=188)</td>
<td></td>
<td>Anti-VEGF injection therapy in conjunction with complete PRP treatment in 2 or more sessions</td>
</tr>
<tr>
<td>Europe</td>
<td>51.9%</td>
<td>33.7%</td>
</tr>
<tr>
<td>(n=297)</td>
<td></td>
<td>Anti-VEGF injection therapy in conjunction with complete PRP treatment in 2 or more sessions</td>
</tr>
<tr>
<td>United States</td>
<td>32.7%</td>
<td>32.5%</td>
</tr>
<tr>
<td>(n=742)</td>
<td></td>
<td>Anti-VEGF injection therapy in conjunction with complete PRP treatment in 2 or more sessions</td>
</tr>
</tbody>
</table>
What is your first-line treatment for symptomatic VMT with focal vitreous traction (<200 μm) and a small macular hole, VA = 20/50?

- **Africa/Middle East**
  - Observation: 39.1%
  - Surgical intervention: 42.1%
  (n=197)

- **Asia/Pacific**
  - Observation: 16.2%
  - Surgical intervention: 73.4%
  (n=222)

- **Central & South America**
  - Observation: 18.7%
  - Surgical intervention: 71.1%
  (n=187)

- **Europe**
  - Observation: 12.1%
  - Surgical intervention: 59.9%
  (n=297)

- **United States**
  - Observation: 11.9%
  - Surgical intervention: 70.4%
  (n=739)
What is your experience with, and assessment of, 3D heads-up visualization systems?

<table>
<thead>
<tr>
<th>Region</th>
<th>Have used it in the OR and it has been helpful</th>
<th>Have not used it in the OR, but plan to in the future</th>
<th>Have not used it in the OR, do not think it is helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa/Middle East</td>
<td>24.1%</td>
<td>37.4%</td>
<td>28.7%</td>
</tr>
<tr>
<td>(n=174)</td>
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</tr>
<tr>
<td>Asia/Pacific</td>
<td>15.1%</td>
<td>46.2%</td>
<td>28.6%</td>
</tr>
<tr>
<td>(n=199)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central &amp; South America</td>
<td>16.6%</td>
<td>49.1%</td>
<td>20.6%</td>
</tr>
<tr>
<td>(n=175)</td>
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<td></td>
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</tr>
<tr>
<td>Europe</td>
<td>22.1%</td>
<td>36.0%</td>
<td>25.3%</td>
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<tr>
<td>(n=253)</td>
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<tr>
<td>United States</td>
<td>34.4%</td>
<td>36.3%</td>
<td>17.6%</td>
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<tr>
<td>(n=663)</td>
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</tbody>
</table>
What is your opinion of intraoperative OCT?

<table>
<thead>
<tr>
<th>Region</th>
<th>Have used and find it useful for macular surgery (%)</th>
<th>Have used and do not find it useful for macular surgery (%)</th>
<th>Have not used it (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa/Middle East</td>
<td>1.7%</td>
<td>17.9%</td>
<td>75.1%</td>
</tr>
<tr>
<td>(n=173)</td>
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<tr>
<td>Asia/Pacific</td>
<td>8.6%</td>
<td>6.1%</td>
<td>76.6%</td>
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<tr>
<td>(n=197)</td>
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</tr>
<tr>
<td>Central &amp; South America</td>
<td>3.4%</td>
<td>5.7%</td>
<td>89.7%</td>
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<tr>
<td>(n=175)</td>
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<tr>
<td>Europe</td>
<td>10.7%</td>
<td>9.1%</td>
<td>70.2%</td>
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<tr>
<td>(n=252)</td>
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<tr>
<td>United States</td>
<td>4.4%</td>
<td>8.0%</td>
<td>80.5%</td>
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<tr>
<td>(n=662)</td>
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</tbody>
</table>
In the last year, have you learned a new technique via online video less than 24 hours before performing it?

- **Africa/Middle East (n=197)**
  - Yes: 72.6%
  - No: 27.4%

- **Asia/Pacific (n=222)**
  - Yes: 58.6%
  - No: 41.4%

- **Central & South America (n=185)**
  - Yes: 67.6%
  - No: 32.4%

- **Europe (n=298)**
  - Yes: 62.4%
  - No: 37.6%

- **United States (n=736)**
  - Yes: 53.8%
  - No: 46.2%
Which local anesthetic do you prefer for transconjunctival sutureless vitrectomy?

- **Africa/Middle East** (n=173):
  - Sub-Tenon’s injection: 22.0%
  - Peribulbar injection: 54.3%
  - Retrobulbar injection: 17.9%

- **Asia/Pacific** (n=196):
  - Sub-Tenon’s injection: 21.9%
  - Peribulbar injection: 47.4%
  - Retrobulbar injection: 28.6%

- **Central & South America** (n=177):
  - Sub-Tenon’s injection: 13.6%
  - Peribulbar injection: 55.9%
  - Retrobulbar injection: 29.9%

- **Europe** (n=253):
  - Sub-Tenon’s injection: 21.7%
  - Peribulbar injection: 41.1%
  - Retrobulbar injection: 34.4%

- **United States** (n=664):
  - Sub-Tenon’s injection: 19.7%
  - Peribulbar injection: 59.5%
  - Retrobulbar injection: 16.7%
How often do you perform pneumatic retinopexy?

- **Africa/Middle East** (n=173)
  - Never: 39.3%
  - 1-3 times per month: 51.4%
  - < once per month: 8.7%
- **Asia/Pacific** (n=196)
  - Never: 38.8%
  - 1-3 times per month: 51.0%
  - < once per month: 8.7%
- **Central & South America** (n=177)
  - Never: 35.0%
  - 1-3 times per month: 55.4%
  - < once per month: 7.9%
- **Europe** (n=254)
  - Never: 41.3%
  - 1-3 times per month: 44.1%
  - < once per month: 11.4%
- **United States** (n=664)
  - Never: 14.9%
  - 1-3 times per month: 54.7%
  - < once per month: 26.2%
What has your experience been with no-facedown positioning after macular hole surgery?

<table>
<thead>
<tr>
<th>Region</th>
<th>Tried no-facedown positioning; have made it my current practice</th>
<th>Never tried no-facedown positioning, but have thought about it</th>
<th>Never tried no-facedown positioning; not interested</th>
<th>Tried no-facedown positioning, but wasn’t happy with the results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa/Middle East</td>
<td>13.3%</td>
<td>49.1%</td>
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<tr>
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<td>37.0%</td>
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<tr>
<td>(n=254)</td>
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<tr>
<td>United States</td>
<td>13.1%</td>
<td>37.6%</td>
<td>32.1%</td>
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<td>(n=663)</td>
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</table>
What is your preferred tamponade following diabetic TRD repair if you did not identify/induce any retinal breaks?

- **Africa/Middle East**
  - (n=173)
  - 42.8% No tamponade, just balanced salt solution
  - 25.4% Partial air fill

- **Asia/Pacific**
  - (n=196)
  - 31.1% No tamponade, just balanced salt solution
  - 26.5% Complete air fill

- **Central & South America**
  - (n=177)
  - 31.1% Complete air fill
  - 20.3% C3F8

- **Europe**
  - (n=255)
  - 21.2% No tamponade, just balanced salt solution
  - 29.8% Complete air fill

- **United States**
  - (n=664)
  - 33.6% No tamponade, just balanced salt solution
  - 32.7% Complete air fill
Thank You