

In this RWC column we will discuss:

- The Vitreo-Retina Society of the Philippines;
- Myopic Macular Holes When to Operate?;
- Harada's Disease; and
- Improving Surgical Outcomes With Intraoperative Fluorescein Angiography.

Kourous Rezaei, MD, President Ashish Sharma, MD, Committee Co-Chair Lihteh Wu, MD, Committee Co-Chair

#### **RWC GLOBAL SOCIETY PARTNER**

#### THE VITREO-RETINA SOCIETY OF THE PHILIPPINES

Founded in 1999, the Vitreo-Retina Society of the Philippines (VRSP) is a professional organization representing ophthalmologists practicing medical and surgical retina in the Philippines. With over 160 members throughout the country, the members of the VRSP are a positive force in national development, providing access to specialized eye care,



improving the standards of medical practice, and in-

fluencing health care policies. Regular activities include educational meetings, an online educational series called the VR Channel, VR Fellows Forum, the Mulat Mata Diabetic Retinopathy Screening and Awareness program, and the VRSP Retina Registry, a census of nationwide retinal diseases, management, and outcomes.

The VRSP is honored to announce that Manila will be the host city for the prestigious 18th Congress of the Asia-Pacific Vitreo-Retina Society (APVRS) in 2025. This event is scheduled for December 11-14, 2025, and is set to be one of the most awaited gatherings in the field of retina. This congress will convene renowned experts from across the Asia-Pacific region and other parts of the world. The focus will be on the latest breakthroughs, techniques, and knowledge exchange in the field of retina. This significant event will be held in conjunction with the Annual Congress of the Philippine Academy of Ophthalmology, showcasing the unity, progress, and strength of the ophthalmology community in the Philippines and the broader Asia-Pacific region. Beyond the scientific sessions, participants can look forward to a myriad of opportunities for learning, networking, and collaboration. According to Dr. Harvey Uy, the current President of the VRSP, "This is not just a gathering of minds, but also a celebration of progress, collaboration, and cultural exchange. We are eager to welcome our peers and industry partners from around the globe and showcase the best of what Manila and the Philippines have to offer."

We invite all retina specialists, researchers, academicians, and industry partners to mark their calendars and join us for this groundbreaking event. Together, let us write the next chapter in the future of retina care and research. For more information, registration details, and event updates, please visit www.vrsp.org.ph.

#### RETINA WORLD CONGRESS VIDEO GALLERY CASE OF THE MONTH

## **Improving Surgical Outcomes With Intraoperative** Fluorescein Angiography

Submitted by: Joaquin Sosa Lockward, MD, Dr. Elias Santana Hospital, Santo Domingo, Dominican Republic https://retinaworldcongress.org/surgical/improving-surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-intraoperative-fluorescein-angiography-in-pdr/surgical-outcomes-with-in-pdr/surgical-outcomes-with-in-pdr/s

Intraoperative Fluorescein Angiography (IOFA) is a new technology that has come to stay. It provides real-time spatial and temporal resolution of the retinal circulation, allowing a deeper understanding of vascular diseases of the retina and opening new roads for future research.

In this surgical case, after removing the vitreous hemorrhage and releasing the posterior pole, fluorescein is injected, and the 3D digital barrier filter is placed. In early phases of the IOFA, focal leakage points are observed, which become more pronounced in late phases. These leakage points are treated with laser photocoagulation, thus preventing complications like vitreous hemorrhage in the early postoperative period.

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#### HOT TOPIC IN THE WORLD OF RETINA

# Myopic Macular Holes – When to Operate?

Submitted by: Ramin Tadayoni, MD, PhD, Université Paris Cité, French Myopia Institute, Lariboisière and Fondation Adolphe de Rothschild hospitals, Paris, France; Carlos Mateo, MD, Institute of Ocular Microsurgery, Barcelona, Spain; Barbara Parolini, MD, Eye Care Clinic, Brescia, Italy

Myopic macular holes (MH) arise from a complex interplay of tractional forces exerted by the vitreomacular interface, epiretinal tissue, and progressive scleral ectasia of the posterior segment. This disease needs vitreoretinal intervention for its repair. However, surgical management remains a challenge for the majority of surgeons. In this discussion, our experts will share the nuances to better deal with this complex disease.

Ramin Tadayoni, MD, PhD, Université Paris Cité, French Myopia Institute, Lariboisière and Fondation Adolphe de Rothschild hospitals, Paris, France. For me, it's very important to assess these cases in detail to understand the risk-benefit ratio of surgical intervention. In a published series, a macular hole is found in the fundus of adults with high myopia in around 1% to over 10% of cases. 1,2 These holes differ from non-myopic primary, posterior vitreous detachment-generated, macular holes by several points. High myopia macular holes may not be associated with decreased vision and often the vitreous is not detached, suggesting a different pathophysiology. Indications for surgery are also different. Several typical conditions can be considered.

First, a non-central macular hole. It happens that a posterior hole found in the fundus of highly myopic eyes with a history of macular surgery, or in some cases even without history, is not central in the fovea. As these fundi are not always easy to analyze the first point is to ensure that the diagnosed hole is really central. Otherwise, the surgery would not change the vision and if a decrease in acuity is reported, it is possibly related to another problem.

Second, a macular hole with no change in vision. This could happen in highly myopic eyes, typically associated with some macular schisis. Surgery will not change the vision if there is no decrease, and the benefit-risk ratio may not be in its favor if the visual acuity is high. However, the patient should be informed that a significant proportion of these eyes will present a decrease in vision and/or complications such as a macular detachment later. These eyes need then a close follow-up. If vision decreases, surgery will be indicated. It is also of note that some of these "asymptomatic macular holes" may present at some point a decrease of vision related to another complication of myopia such as choroidal neovascularization requir-

ing a specific treatment. Any decrease in vision must then be carefully analyzed before proposing surgery.

Third, as high myopia can also cause atrophy in the macula, the appearance of a macular hole in an atrophic macula may not change the vision or its treatment.

These are examples of situations when surgery may not be beneficial. In other myopic eyes with a macular hole associated with a decrease of vision, and no other cause explaining the change in vision, surgery is indicated to restore vision, to prevent further decrease of vision and macular detachment that can happen in highly myopic eyes with posterior staphyloma.

In my opinion, in the myopic eye, any decision for surgery needs a careful history taking, clinical examination and analysis of the fundus with appropriate imaging to eliminate other macular complications of high myopia and establish chances of improvement after surgery.

Carlos Mateo, MD, Institute of Ocular Microsurgery, Barcelona, Spain. When addressing surgery of the macular hole (MH) in the high myopic eye, we must consider several factors:

- 1. In high myopia, the detection of an MH may be difficult by biomicroscopy: the low contrast in the macular area, when a staphyloma is present, pigmented changes of the retinal pigment epithelium (RPE) or vitreous opacities may hinder exploration. An optical coherence tomography (OCT) exam is essential to rule out or confirm the existence of a MH early stages, taking into account that some early-stage MH may not show visual loss and may also occur at younger ages than MH in emmetropic eyes.<sup>4</sup>
- 2. In high myopia, there are two types of MH depending on whether there is associated retinoschisis or not.<sup>5</sup> In MH without retinoschisis, the height of the side walls and inner diameter may be similar to idiopathic MH but their visual prognosis is usually worse. Early detection can be important to prevent the MH from ending with an increased diameter and a worse visual prognosis. On the other hand, we must keep in mind that some MH without associated retinoschisis may come from long-standing lamellar holes with lamellar epiretinal hole proliferation that will hinder its surgical treatment. Generally, for these MH, we recommend performing surgery as soon as possible.

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Moreover, there is a second group of MH associated with surrounding retinoschisis. In general, these holes come from long-term retinoschisis and their treatment and prognosis are usually worse. Probably, these MH with associated retinoschisis show a higher risk of progression towards retinal detachment.<sup>6</sup> Again, we recommend performing surgery as soon as possible, although its evolution is usually not fast. Macular retinoschisis should be detected and controlled before it progresses to a full-thickness MH with associated retinoschisis.

- 3. In some cases, central severe RPE atrophy may exist and the visual prognosis is therefore poor. The benefits of surgery in these cases are, at least, doubtful.
- 4. Unfortunately, some cases develop RPE atrophy after successful MH closure, which will lead to a progressive decline in visual acuity.<sup>7</sup>

Barbara Parolini, MD, Eye Care Clinic, Brescia, Italy. Lamellar (LMH) or full-thickness macular holes (FTMH), in high myopic eyes, are part of a wider entity, known as myopic traction maculopathy (MTM). MTM is an evolving disease and switches from one stage to another in time.

The nomenclature of the stages as well as the natural history and time taken to evolve from one stage to the next is described by the MTM Staging System (MSS), published in 2020,<sup>8</sup> and internationally validated by a recent publication organized by the RWC research group.<sup>9</sup>

As described by the MSS and as highlighted in literature, 10 stages 1b and 2b should be observed, as they are slowly progressive. Stages 3b and 4b, where the lamellar hole is combined with a macular schisis and/or detachment, should be treated with a macular buckle first, as the main issue is related to the detachment of the macula in the elongated eyewall. After solving the schisis and/or detachment with a macular buckle, the LMH should be treated only if the surgeon judges that vision could significantly improve by pars plana vitrectomy (PPV) and maneuvers on the hole. But this is rarely necessary and usually only if the depth of the LMH deepens into the outer macular layers.

Stage 1c and 2c should be treated only if it is judged that vision could significantly improve by surgery. Stages 3c and 4c, where the FTMH is combined with a macular schisis and/or detachment, should be treated first with a macular buckle to treat the schi-

sis and/or detachment of the macula, while PPV and maneuvers on the hole should be applied to close the hole. PPV can be done simultaneously of sequentially to macular buckle. It was reported that macular buckle can solve stages 3 and 4 in 96.16% of cases and PPV with ILM flap can close a FTMH in 87.9% of cases with significant improvement in vision.<sup>6</sup>

LMH or FTMH surgery is useful in the absence of other visually threatening conditions linked to high myopia (macular atrophy and optic nerve disease) and might lead to visual improvement.

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Updates and news from the Retina World Congress

#### RETINA ROCKS IMAGE GALLERY CASE OF THE MONTH

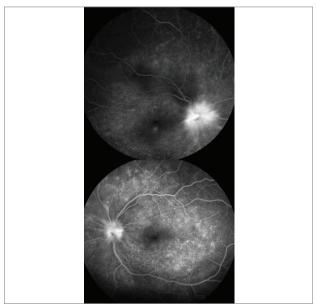
### Harada's Disease

Submitted by: Anjana Mirajkar, MS; Navneet Mehrotra, DNB, FRF, FICO; Manish Nagpal, MS, DO, FRCS; Retina Foundation, Ahmedabad, Gujarat, India

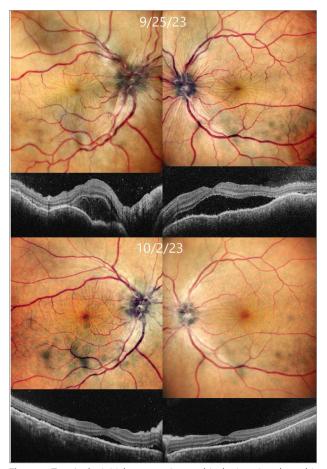
This 41-year-old woman presented with headaches, redness, and pain in her right eye (OD) for 1.5 months and left eye (OS) for 2 weeks. She was diagnosed elsewhere with angle closure glaucoma, received a YAG peripheral iridotomy and started on glaucoma drops. She then saw several other doctors who diagnosed her with papilledema. Her cerebrospinal fluid opening pressure was 21 mm  $\rm H_2O$ , and treatment was started on oral acetazolamide for a presumed diagnosis of idiopathic intracranial hypertension (IIH). In our office, vision was 20/100 OD and 20/60 OS. Intraocular pressure (IOP) was 30 mmHG.

Anterior segments showed shallow anterior chambers with retrolental vitreous cells. Posterior segments showed irregular chorioretinal folds, multifocal serous detachments, and disc hyperemia. Optical coherence tomography scanning revealed a bacillary layer detachment OD, subretinal fluid OS, and a bilateral undulating thickened choroid (Figure 1, top). Fluorescein angiography showed bilateral optic nerve leakage and areas of pinpoint subretinal leakage (Figure 2).

She was diagnosed with Harada's disease and treatment was started on intravenous methylprednisolone for 3 days, followed by 60 mg prednisone by mouth (PO) daily. She was also referred to rheumatology to start immunosuppressants. The acet-



**Figure 2.** Fluorescein angiography shows bilateral optic nerve and areas of pinpoint subretinal leakage.



**Figure 1.** Top. At the initial presentation, multicolor imaging shows bilateral irregular chorioretinal folds, multifocal serous detachments, and disc hyperemia. Optical coherence tomography scanning shows a bacillary layer detachment in the right eye, subretinal fluid in the left eye, and a bilateral undulating thickened choroid. Bottom. One week into systemic corticosteroid treatment, there was marked bilateral improvement in the chorioretinal folds, macular fluid and choroidal thickening.

azolamide for the misdiagnosed IIH was discontinued. One week later, her vision improved to 20/40 in both eyes (OU), IOP was 10 mmHG OU with marked bilateral improvement in the chorioretinal folds, macular fluid, and choroidal thickening (**Figure 1**, bottom). A slow steroid taper was begun pending starting immunosuppressants.

This case has many classic findings for Harada's disease, including bilateral panuveitis, optic nerve swelling, thickened choroid, chorioretinal folds, and multifocal serous exudative retinal detachments. This case also reminds us that it is easy to misdiagnose these complex uveitis cases, especially when all the ocular findings are not taken in total to try to give the patient a single, unifying disease.

This case is from the Retina World Congress' Retina Rocks (retinaworldcongress.org/retina-rocks), the world's largest online, open-source retina image gallery and reference library.

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