# EXPERTS WEIGH IN ON PHARMACOLOGIC THERAPY FOR RETINAL DISEASE

Aspen Retinal Detachment Society panelists discussed various management strategies for DME and RVO.

### BY THE STAFF OF RETINA TODAY

After a year hunkered down at home due to the COVID-19 pandemic, it was a true pleasure to see friends and colleagues in person at the 49th annual Aspen Retinal Detachment Society (ARDS) meeting in Snowmass, Colorado. Even with our masks on, it was easy to see just how excited everyone was to step away from their computers to share cutting-edge clinical techniques and tools among peers.

A key component of every ARDS meeting is our panel discussions, during which experts share their clinical insights, ask questions, and field comments from the audience. In this issue, we summarize the panel on pharmacologic therapy of non-AMD retinal diseases. We examined a case of diabetic macular edema (DME) submitted by Dennis P. Han, MD, and a patient who presented to Timothy W. Olsen, MD, with central retinal vein occlusion (CRVO). We were joined by Allen C. Ho, MD, FACS, and Ryan M. Rich, MD. Together, we worked through some of the toughest clinical questions, including what imaging is beneficial for each presentation, what clinical signs dictate the course of treatment, and how to pivot when the patient isn't responding to the chosen therapy.

Registration is already open for ARDS 2022—our 50th anniversary meeting—set for March 5-9. Head to https://aspenretina.com for more information, and get ready to hit the slopes and the lecture hall...together.

- Timothy G. Murray, MD, MBA

he field of retina is constantly evolving with advances in diagnostics and therapeutics, and it's important to consider how each new tool and therapy will fit into current management strategies. Several questions worth asking include: How do we move from one therapy to another? When do we combine therapies? What is the role of imaging? What is the burden of treatment on patients?

At this year's ARDS annual meeting, a panel of retina specialists—Dennis P. Han, MD; Allen C. Ho, MD; Timothy W. Olsen, MD; and Ryan M. Rich, MD—addressed some of these questions while evaluating patient cases to consider how pharmacologic therapies might factor into management.

#### THE CASES

#### Diabetic Macular Edema

Panel moderator, Timothy G. Murray, MD, MBA, opened the discussion with Dr. Han's case of a 54-year-old patient with type 2 diabetes, who presented with decreased visual acuity. The patient's medical history included previous treatment with panretinal photocoagulation (PRP) and a focal grid. Panelists were

asked to weigh in on the best possible treatment approaches.

Dr. Han noted that the patient likely has severe DME in both eyes. He stated he would order an OCT, check for neovascularization, and prescribe anti-VEGF therapy—an approach that prompted a discussion about when to order fluorescein angiography for patients with diabetes. In cases where intraretinal fluid persists despite treatment or inflammation is suspected, fluorescein can be helpful.

For patients with systemic risk factors such as heart attack or stroke, Dr. Ho said he considers monotherapy with steroids, although anti-VEFG injection is preferred. With these patients, Dr. Ho educates them on the theoretical concern for a blood clot causing an occlusion with anti-VEGF therapy, which dictates the use of a steroid as a firstline approach in lieu of anti-VEGF.

The panelists also discussed the benefits of imaging; OCT is "the single best educational tool that I have ever had, and patients really engage with that," Dr. Murray said. "I thought I was doing it for me, but I'm really doing it for them." Dr. Rich agreed, noting that using widefield angiography to

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show patients the regression of vessels after PRP helps them understand the benefit of the treatment.

Finishing up, the panelists discussed when it would be appropriate to perform surgery along with anti-VEGF therapy. If a taut hyloid is present, surgery might be useful to enable an anti-VEGF response, Dr. Han said. Maria Berrocal, MD, joined the conversation from the audience, adding her belief that operating early, rather than reserving surgery as a last resort, may be beneficial in patients with severe disease progression or excess intraretinal fluid.

#### **Retinal Vein Occlusion**

Dr. Murray then introduced the next case, initially seen by Dr. Olsen. A 64-year-old man with decreased visual acuity for the past 2 weeks (20/20 OD and 20/200 OS) and a history of glaucoma presented with a CRVO. Dr. Olsen said the pupil examination was normal, which ruled out ischemia. He skips the ERG in CRVO patients in favor of OCT and, in this patient, chose to initiate anti-VEFG therapy.

Which anti-VEGF agent to start with, however, is another question altogether. Dr. Murray suggested most clinicians start with bevacizumab (Avastin, Genentech), although the panelists agreed that insurance companies dictate the drug choice most of the time. A lively discussion ensued, punctuated by Dr. Han's pointed commentary: "The problem is that there's a dearth of evidence-based information that supports using something other than bevacizumab for the first few injections," he said.

The panelists also discussed the best approach for patients whose visual acuity does not improve after their first anti-VEGF injection. Before moving to a different drug or deciding that the patient is nonresponsive to anti-VEGF therapy, it is often worthwhile to give injections more frequently (every 2 or 3 weeks) to determine an effective treatment interval. Another option is to add topical carbonic anhydrase inhibitors, such as dorzolamide, to reduce fluid in the retina, Dr. Murray said.

When a patient does have a positive response, the next question is if/when to extend treatment. Most panelists agreed that their first move is to extend out to 6 weeks. Dr. Murray noted that extending no more than 2 weeks at a time can help ensure the patient is consistently seeing a clinical benefit. For many of Dr. Murray's CRVO patients, 16 weeks is the maximum treatment interval, but in some cases 6 months is possible, depending on the presence of ischemia. Even if you can extend anti-VEGF injections to every 6 months, you can't really stop injecting these patients, according to Dr. Murray, because if you do, they are at risk for developing neovascular glaucoma.

#### FINAL THOUGHTS

Advances in pharmacology are changing the retina landscape, and retina specialists must work hard not only to keep up with new products and technologies, but also to personalize therapy to their patients' needs.