

What is the Best Treatment for Macular Edema?

Macular edema remains one of the most common causes of visual loss. It can be caused by a variety of conditions, including diabetes (see *Retina Today*, September/October 2008), retinal vein occlusion, and inflammation. There are numerous treatments for macular edema, and quite a bit of controversy over which one is best.

In this issue of *Retina Today*, we focus on new insights into macular edema beginning with the role of the Müller cell in its formation and extending to various treatments ranging from pharmacotherapy to laser and vitrectomy. Although antivascular endothelial growth factor (VEGF) agents were initially developed for their anti-angiogenic roles, it was clear from the beginning that they might also be helpful in treating macular edema due to VEGF's role in inducing vascular permeability. However, there are many mechanisms other than ischemia and VEGF that cause macular edema. Depending on the type of macular edema, the underlying mechanism and successful treatment will vary.

For example, the underlying mechanism in uveitic cystoid macular edema (CME), which is discussed in an article within this issue, is inflammation. Even in inflammatory CME, however, there is no single agreed-upon treatment and the therapies range from topical nonsteroidal antiinflammatories to systemic corticosteroids to immunomodulatory therapy to VEGF inhibitors.

We also discuss macular edema secondary to other pathologies, such as retinal vein occlusion (RVO). Therapies for RVO that have been investigated include anti-VEGF therapy, grid laser photocoagulation, intravitreal triamcinolone acetate, and vitrectomy with inter-

nal limiting membrane peeling. We present summaries of three separate studies, each which evaluate different

therapies. These studies are small and the authors acknowledge the need for larger, more controlled studies. The findings, however, bring up interesting points for consideration and represent an improvement in understanding how to resolve macular edema when accompanied by RVO.

CME after cataract surgery is commonly encountered by our anterior segment colleagues and, although these cases are usually only referred to a retina specialist when it is severe or recalcitrant, we can benefit from information on how these cases are handled and resolved. Thus, we have also included an article in this issue that details an anterior segment surgeon's perspective on treating CME.

A NEW YEAR AHEAD

This issue of *Retina Today* represents the close of our first year in global circulation. We are looking forward to 2009 and increased frequency to eight times a year.

We will continue to expand our circulation list and be a presence at retina scientific meetings throughout the world. As always, we welcome your feedback, but most importantly, we thank you for your support. ■



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