

BREAKS, TEARS, AND HOLES, OH MY!



This year's Euretina 2021 Virtual Conference included a wealth of clinical topics, with a special focus on innovations such as artificial intelligence and pipeline therapies. One session of particular interest for this surgical issue was the Gisbert Richard Keynote Lecture. Heinrich Heimann, MD, FRCOphth, discussed visual acuity outcomes after retinal detachment (RD) repair, and he gave us a lot to think about.

Compared with the founding fathers of modern vitreoretinal surgery from the 1960s, he said, "We are better at treating complicated retinal detachments, and we are better at saving eyes. But if you look critically, one has to say, to be honest, there's not much of an improvement in the success rates, in the primary success rates of the anatomical outcomes as well as in the visual function."

Boy, did that get our attention. Citing *Michels Retinal Detachment*, "the bible for any vitreoretinal surgeon doing this type of surgery," Dr. Heimann noted that the percentage of patients with a postoperative VA of logMAR 0.4 or better used to be 50% to 56%. Now, however, recent research by Edward Ryan, MD, and David Yorston, FRCS, FRCOphth, show that those rates haven't changed much, he said. "We still have about one-third of all patients that we treat with successful surgery that will not be able to read with that eye."

Dr. Heimann went on to provide some baby steps that could improve the results for RD patients, the most applicable for this issue being improved surgical techniques. "We have to go back to the surgery," he said.

So that's what we are doing. In this issue, we have a slate of articles designed to help you improve your surgical techniques for challenging RDs and macular holes—those that are recurrent, chronic, traumatic, complicated. After all, these are our "bread and butter surgeries," according to Dr. Heimann, and it's what we do best.

Several of your colleagues share tips for operating on patients in their 80s, who are more likely to present with macula-off RDs and worse visual acuity. Surgery is effective in improving visual function in these patients, according to Louis Z. Cai, MD, Samir N. Patel, MD, and Yoshihiro Yonekawa, MD, but outcomes may not be as favorable as they are in younger patients.

Yewlin E. Chee, MD, presents two very different patient scenarios to help you navigate the plethora of decisions that must be made on a case-by-case basis when faced with traumatic RDs.

The lift-and-shave technique for tractional RDs, combined with small-gauge vitrectomy—as discussed here by María H. Berrocal, MD, and Luis Acabá-Berrocal, MD—can streamline the removal of fibrovascular tissue and traction while reducing the need for ancillary instrumentation.

For large, chronic, or atypical macular holes, a squad of top-tier surgeons offers four different approaches: autologous retinal transplantation, macular massage, the use of human amniotic membrane, and the rug technique. If these aren't yet in your wheelhouse, give them a try and see if they help to improve your macular hole closure rates.

Lastly, new sustained-release steroid implants may help you to quell vision-threatening postoperative cystoid macular edema, according to David Eichenbaum, MD.

No matter what type of patient comes to your OR tomorrow, one or more of these techniques and therapeutics might come in handy.

Surgery in the back of the eye can be elegant to perform, but it can also be exceedingly challenging. Hopefully, the surgical approaches described in this issue will arm you with the tools you need to tackle even the toughest cases—and improve upon those static success rate statistics. ■

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ON THE COVER:

Clinical Images

Top left: Retinal detachment repair with the lift-and-shave technique. More on page 24.

Top middle: A proliferative vitreoretinopathy detachment with a dislodged autologous retinal transplant only partially closing the macular hole. More on page 26.

Top right: A patient with extensive scarring of the posterior pole with preretinal and subretinal membranes, consistent with a sclopetaria injury. More on page 20.

Surgeons in Action

Bottom left: María H. Berrocal, MD

Bottom middle (top): Ravi Pandit, MD, MPH (left), and Yoshihiro Yonekawa, MD, (right)

Photo courtesy of Roger Barone

Bottom middle (bottom): M. Ali Khan, MD Photo courtesy of Roger Barone

Bottom right: David Eichenbaum, MD