

Preparing For and Maximizing Your Surgical Retina Training

BY ALLEN CHIANG, MD; PAUL S. BAKER, MD; EUGENE A. MILDER, MD

Vitreoretinal surgery is arguably the most demanding ophthalmic surgical subspecialty to master due to the delicate nature of the retina, the myriad procedures to learn, and the need to adapt to evolving technology. It is for these reasons that primary surgeon experience in vitreoretinal surgery is often lacking at residency programs. Not surprisingly, the learning curve in surgical retina fellowship training is incredibly steep.

DON'T FORGET ABOUT THE ANTERIOR SEGMENT

In the midst of our fellowship training, however, we have been glad to discover that the same qualities and skill sets that enabled us to competently perform anterior segment surgery in residency do, in fact, carry over to retina surgery. For example, an ability to keep the eye in primary position while performing phacoemulsification will facilitate the same when performing pars plana vitrectomy. That is, pivoting or "oar-locking" a light pipe and vitreous cutter will be impossible if one has not learned how to do this when utilizing instruments in the anterior segment. Now is definitely not the time to forget how to suture efficiently, create good scleral tunnels, insert an anterior chamber or sulcus intraocular lens (IOL), or perform phacoemulsification. Those who are currently in residency training with an interest in retina should prioritize becoming an accomplished anterior segment surgeon because mastery of such skills is likely to be expected rather than taught in most retina fellowships.

Similarly, those of us in the retina specialty should stay abreast of advances in the anterior segment realm. Odds are that most retina surgeons who are more than 3 years out from their residencies will not have had any direct experience with newer techniques such as Descemet's stripping endothelial keratoplasty (DSEK), Boston keratoprotheses, and toric, multifocal, or accommodative IOLs.

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As these procedures become increasingly common, retina surgeons will find themselves operating on more of these eyes. Therefore, a familiarity with these new anterior segment techniques and technologies may prove extremely important. A good way to start is by talking to referring doctors about shared patients; you may be surprised by how much they are willing to teach you. A second way is to step outside the retina domain and sit in on a course or two on anterior segment surgery topics at the American Academy of Ophthalmology annual meeting or attend similar conferences within your own institution or at one located nearby. Finally, the Internet is a terrific learning resource that is available all day, every day with sites, such as www.eyetube.net, providing instructive surgical videos that cover the full gamut of ophthalmic surgery. The retina subspecialty is experiencing unprecedented growth, but it is essential to remember that other areas of ophthalmology are also advancing.

MAXIMIZING THE SURGICAL COMPONENT OF RETINA FELLOWSHIP

The steep road to becoming an astute, efficient, and competent vitreoretinal surgeon demands endless practice, perseverance, and a compulsive attention to detail. Achieving this goal requires an active commitment. To that end, following are a few things that we have found to be indispensable during our fellowship training.

Keep a surgical journal. Each surgical case, regardless of outcome, represents a unique opportunity not only to

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**Triamcinolone-assisted
PVD Induction**

By Allen Chiang, MD

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refine fundamental skills, but also to obtain surgical pearls. In many instances, these pearls come from some of the best surgeons in the field and may be invaluable tools in your future practice—if they are added to your surgical armamentarium. That is where mentally reviewing each case and scribbling critical learning points into the journal comes in. Some pearls may focus on key technical aspects of a certain procedure, while others may pertain more to the specific style or approach of a particular mentor. In other cases, you may be implementing a new technique or instrumentation and wish to write pointers down for future reference. I prefer traditional pen and paper so that I can make drawings as well; one of my co-fellows prefers to keep his surgical journal on his laptop. Choose the medium you like and go with it.

Spend time reviewing film. It is no mystery that the best professional athletes are usually the ones who commit the most time to watching film after practice. It is really no different with retina surgery. Recording your cases on a regular basis provides an opportunity to identify surgical inefficiencies and flaws, which then allows you to make corrections accordingly. It also provides a tangible way to track your progress over the duration of fellowship. Furthermore, you will have built a nice surgical video library for yourself upon completion of fellowship. You may also stumble upon a great case that can be shared with colleagues as part of a lecture or the annual American Society of Retina Specialists Film Festival. The small cost of a spindle of blank DVDs is worth it.

Work with various faculty. This may be more of a point to consider for residents who are applying to or in the process of selecting a retina fellowship, but it is worth mentioning. Everyone knows there are many ways to skin a cat. Learn as many different techniques as you can before choosing the one you like best in any given situation. Learn the different nuances of 25- vs 23- vs 20-gauge vitrectomy, segmental vs encircling scleral buckles, how to use radial buckle elements, and how to perform pneumatic retinopexy. Even if your institution has a particular philosophy or tradition regarding a specific technique, you can usually find one or more attendings who are flexible enough to permit you to employ a dif-

ferent technique. Your first year out in practice is not an optimal time to be learning new techniques.

Discuss your complications. By virtue of being human, the odds are that you will at some point make a mistake regardless of how talented or well trained you are. General surgeons are to be admired for their regular morbidity and mortality conferences, also known as “M&M” conferences. Even if your fellowship does not conduct a formal M&M conference, it is indispensable to maintain open dialogue among co-fellows and attendings regarding any surgical complications. The process of sitting down and verbally breaking down the surgical case, reviewing the steps that led up to the complication and how it was handled, and discussing how it could be avoided in the future either from an individual or systems standpoint is invaluable and healthy. It helps reduce anxiety, build camaraderie, and, most importantly lower the risk of recurrence. Perhaps the worst environment (particularly for our patients) is one in which physicians hide behind false pretenses, never discussing complications or difficult cases. Learning how to manage complications is a critical component of fellowship training and should not be neglected.

Participate in faculty-fellow surgical meetings. At Wills Eye Institute, we are fortunate to have regularly scheduled meetings with attendings to discuss various topics in vitreoretinal surgery. One of these meetings, which takes place early in the morning over breakfast at a nearby café on a biweekly basis, has quickly become a fellowship favorite. These meetings present a great opportunity to sort through things you may have read but just did not quite understand, review surgical techniques and instrumentation, or discuss complications. In addition, it provides an opportunity for mentorship to occur in an otherwise busy environment.

SUMMARY

We hope that this article is helpful for maximizing your surgical retina fellowship training. It is our opinion that continuing some or all of these practices beyond fellowship will promote lifelong learning, assist you in teaching future surgeons, and benefit your practice in intangible ways. ■

Allen Chiang, MD; Paul S. Baker, MD; and Eugene A. Milder, MD, are second-year vitreoretinal fellows at Wills Eye Institute,

Thomas Jefferson University, and members of the Retina Today Editorial Board. Dr. Chiang may be reached at allen_chiang@alumni.brown.edu; Dr. Baker may be reached at pbakerny@yahoo.com; and Dr. Milder may be reached at genemilder@gmail.com.

