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surgical diseases with small-gauge surgery. I think that the next approach in retinal diseases will be driven not only by therapeutics but also by the different diagnostic modalities that we use in terms of imaging. Advancements will likely be made in genetics, with treatments based on specific gene mutations; sustained drug-delivery devices; and newer agents beside anti-VEGF therapy. Newer compounds may allow us to not only maintain and preserve vision but also improve vision in terms of alleviating some of the damage that retinal diseases cause to the pigment epithelium and photoreceptors.

We will continue to push the envelope in the treatment of surgical diseases as well and will likely have better instrumentation and improved intraoperative visualization with more advanced microscopes and optical coherence tomography imaging. At the same time, I think the way in which we deliver anesthesia may also be different down the road. The location and logistics of the way we see patients and where we perform surgery will continue to evolve; this has already begun with the proliferation of ASCs for retinal surgery. At the end of the day, despite all of the new therapeutics and instrumentation, there are older techniques that will still be important to use and teach, such as scleral buckling surgery.

5. What are your interests outside of ophthalmology?

My first and foremost interest is my family. I have 2 daughters, and my wife and I make it a point to spend as much time with them as possible, both when we are in town and when we travel. We try to take our children to as many places as possible so that they get to know the world firsthand rather than through CNN or Fox news. They have been fortunate and privileged to attend a lot of the retina meetings as well, which has created a network of friends in the retina community for them. Our retina community is very small, and just as a lot of us are colleagues, many of our kids have become friends, and it is nice for them to have that camaraderie. We are quite fortunate in that we have been able to visit some amazing and exotic places around the world and in our country. Visiting, hiking and exploring natural and historic wonder-inducing cultures (while missing some school) has increased all of our tolerances and given us a different perspective on the issues that affect the world. Traveling allows you to take a step back and reflect and realize that the journey is as important, if not more important, than the destination. Beside traveling, one of my other interests is taking photographs to document our journeys so that we can remember the memories we have with our children. A personal photograph that brings back and rekindles those memories is much better than any souvenir you can buy. ■

Gaurav K. Shah, MD

Dr. Shah is a vitreoretinal specialist and Director of Vitreoretinal Fellowship at The Retina Institute in St. Louis, MO, and a Professor of Clinical Ophthalmology at Washington University School of Medicine.



1. Why did you decide to become an ophthalmologist and to subspecialize in retina?

The main reason for my being in ophthalmology is my father. He was heavily involved with the Lions Club International in India, where I grew up, and I used to go with him to the cataract eye camps that he would coordinate for the underprivileged and poor. That was my first exposure to ophthalmology, and I was fascinated by the amount of need that I witnessed firsthand, which made a very strong impression on me.

I certainly did not always know that retina was going to be the field for me. In medical school, I worked in the vitreoretinal lab of Norman Blair, MD, who was doing research into retinal diseases, which got me interested in ophthalmology and also in retina. During that time, I would attend the grand rounds, not really knowing what I was seeing, but I was amazed by all the diseases that were manifested in the retina, such as sickle cell disease, hypertension, and diabetes. As a medical student, I could actually see something a patient had, rather than trying to listen to a murmur in the heart that I was not completely sure I really heard. Those experiences at the Eye and Ear Infirmary solidified my decision to pursue ophthalmology.

During residency, I had very good training at the University of Minnesota with retina specialists both at the university and in the community. After watching them fix retinal detachments and diabetic tractional retinal detachment, and perform other procedures in the office, I was hooked. I was convinced retina was the right choice for me. It was certainly not the thought of administering multiple intravitreal injections, as we currently do, that was the motivating factor. I was fortunate that many individuals in Minneapolis took a special interest in my career and encouraged me and helped me to pursue a retina fellowship at Wills Eye Hospital, for which I will be forever grateful.

2. How would you describe your approach to treating patients and to medicine in general?

All of us have different ways of successfully seeing and managing patients. I try to keep patient management as simple and efficient as possible for myself and my patients. I think we have to be practical when it comes to applying the study results of well-done clinical trials to our treatment of patients in the office, as there are many other factors that come into play. It is important

to use studies as a guide and to use them in context to the patient's individual situation, as many times patients' disease states are quite different in terms of severity, duration, etc., from those studied in clinical trials. Trials are important for drug approvals but should not be used in a dogmatic, black-and-white approach. I try to simplify things for the patient, which is important because our goal is not to turn our patients into retina fellows but to give them information that is practical and relevant. I also think it is very important to talk *to* patients rather than talking *down to* them, as that becomes counterproductive and instills very little confidence in them. As far as surgical management, similar principles apply, but it is critical from the very beginning to explain to the patient what can and cannot be achieved so that expectations are similar for both sides; if they are incongruous, unhappiness will result. Despite all of the complications that can occur during surgery, your patients must be confident that you can fix their problem. I have learned that it is really common-sense stuff that our patients appreciate, and if you take care of them, they will take care of you.

3. What skills do you try to instill in your students?

I am the fellowship director at The Retina Institute in St. Louis, and we are fortunate to have very good fellows. A lot of the skills that I feel are important to teach our fellows were taught to me by my mentors in Minnesota and at Wills Eye Hospital. In addition to achieving success in the operating room and patient-management skills previously discussed, I think one of the most important messages I tell our fellows is to contribute to their field, whether that be on the political front, on the academic front, or on the community front. Do something that leaves your profession better than it was when you started. I also tell them to be aware of the business side of retina because it is critical to be educated and be an active participant in that process.

4. What novel therapeutic approaches or surgical techniques do you anticipate will improve the treatment of vitreoretinal diseases over the next few years?

In retina, we are fortunate that in the past 5-10 years tremendous progress has been made in terms of therapy for diseases such as macular degeneration and diabetic retinopathy. We have also seen advances in

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