

VOLUME PROBLEMS

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If you could identify one word that crops up more than you would ever expect in your day-to-day practice, what would it be?

We would like to suggest *volume*. It's no surprise that the first association that pops into our minds is related to our workload. Patient volumes seem to be at an all-time high, and conference halls are ringing with concerns about how to handle the growing volume of pharmaceuticals we must stock. (Is anyone else oddly familiar with the price of high-capacity refrigerators these days?)

Or maybe you are an OCT enthusiast and *volume* immediately brings to mind OCT volume scans—intraretinal and subretinal fluid volumes are trusty indicators of disease activity and treatment success, after all.

Are you starting to see the trend? Volume is showing up—and causing pressure—everywhere in our practices! Perhaps nowhere else is the issue of volume more apparent than with our imaging tools. Not only do we have myriad modalities to choose from (fundus photos, OCT, OCT angiography [OCTA], fundus autofluorescence, fluorescein angiography, and ICG, to name a few), but each machine spits out untold amounts of data. The sheer volume of scans, slabs, images, and readouts we have for each patient encounter can be daunting, to say the least. The pile of information, though interesting and useful, can at times feel more like something we must dig ourselves out of than something to guide our disease management.

To further complicate matters, that data is becoming increasingly crucial as we learn more about various retinal diseases; for example, geographic atrophy therapy is pushing us to identify this condition earlier than ever before—and that means digging into our OCT and OCTA scans to find subtle changes. The panelists in this issue's roundtable article on OCTA suggest that we all set aside time after patients are out of the office to look over OCTA images with our fellows. Doing so can help us learn together without the pressures of a busy clinic demanding our immediate attention.

Luckily, we are quite good at finding unique solutions to our volume problems. We hire and train fantastic imaging technicians to help capture and wade through the scans, and researchers are hard at work fine tuning deep-learning artificial intelligence (AI) algorithms that can make sense of all the data for us.

This issue—dedicated to imaging and visualization in retina—shares some of the latest innovations that are

pushing the boundaries when it comes to retinal imaging. In addition to the OCTA roundtable, experts discuss the value of fundus autofluorescence for diagnosing inherited retinal disease and assessing retinal displacement after retinal detachment repair. We also asked colleagues to provide an update on where we stand with AI in retina and, boy, did they deliver, with articles on classifying retinopathy of prematurity, screening for diabetic eye disease, and detecting retinal abnormalities.

For those of you who are interested in the latest technology to navigate increasing surgical volumes, Reem Amine, MD; Leanne Clevenger, MD; and Justis P. Ehlers, MD, provide an excellent how-to guide to using 3D heads-up displays in the OR.

We hope the tips, tricks, and updates within these pages reinvigorate your love for retinal imaging. Hopefully they give you the push you needed to dust off that pile of OCTA scans, consider fundus autofluorescence for that tricky patient, or more closely follow the latest updates on AI technology. Don't let the volume get in your way. ■

LOVE IMAGING and PODCASTS?

We have a few New Retina Radio episodes you might like!

The Utility of OCTA in the Clinic

Cynthia A. Toth, MD, and Amani A. Fawzi, MD, sit down with experts Philip J. Rosenfeld, MD, PhD; Srinivas Sadda, MD; and Nadia K. Waheed, MD, MPH, to discuss the value of OCT angiography in the retina clinic. From assessing macular neovascularization to tracking treatment effect in patients with plaque choroidal retinopathies, this imaging modality can augment current tools—and even replace them, at times.



Innovations in Retinal Imaging

John Kitchens, MD, invites Aleksandra Rachitskaya, MD, and Jonathan Russell, MD, PhD, to discuss the use of imaging technology in the retina clinic. The surgeons discuss cases in which they share their approach to imaging to evaluate wet AMD, retinal detachments, and more.

