



How COVID-19 May Change the Future of Retina Practice



When we think of what the future may hold, it behooves us to think from a public health perspective.

BY RAHUL REDDY, MD, MHS

As I thought about how the spread of COVID-19 will affect ophthalmology care around the world, I found myself drawn to framing my forecasts vis-a-vis my experiences in public health and in a large retina practice. We are health care providers to populations with comorbidities (ie, diabetes) and risk factors (ie, age) that may make a COVID-19 infection fatal.

With this in mind, and at the guidance of organizations such as the ASRS and AAO, many retina specialists have altered their practice patterns. But which changes are here to stay and which are temporary? Given what we know and don't know about the coronavirus, it stands to reason that a number of the changes we have implemented will be permanent or semipermanent. It is worth noting that some of these changes can be implemented even after the pandemic eases, as they may be useful in slowing disease transmission during annual flu seasons.

CHANGES TO THE OFFICE

The changes that are most obvious are those that have been felt in retina clinics around the world: the empty waiting rooms, the face masks, and the ubiquity of sanitizing materials.

Low-Cost/High-Impact Changes

Some low-cost solutions we have implemented, such as mask wearing and alterations to slit-lamp shields, do not disrupt workflow in the clinic and may also have a high impact on decreasing disease transmission. These help mitigate disease transmission when paired with fixed factors such as variable patient flow, room size, and ventilation systems.

Access to negative-pressure and positive-pressure rooms is limited. Mask wearing may continue in health care settings, especially in sites such as retina clinics that care for at-risk populations. We will know more about the effects of mask wearing during a pandemic as more research is published. For the near future, this may be a low-cost safeguard that reduces the risk of transmission within our clinics without causing a major disruption to workflow.

AT A GLANCE

- Modifications made to retina practices in the COVID-19 era may be here to stay even after the threat of coronavirus fades.
- Some low-cost high-impact changes could result in significant reduction in disease transmission risk without adversely affecting workflow or quality of care.
- Adjustments to treatment paradigms that focus on extending duration of treatment may be important for populations particularly vulnerable to complications due to infectious diseases.

GIVEN THE RELATIVELY LOW COST AND SMALL LIKELIHOOD THAT A DETAILED CLEANSING OF HIGH-TOUCH SURFACES IN AN EXAM ROOM WOULD DISRUPT PATIENT FLOW, IT SEEMS POSSIBLE THAT PRACTICE STAFFS WILL CONTINUE TO WIPE DOWN ROOMS WHEN EACH PATIENT LEAVES.

Some protocols of the COVID-19 era may disrupt or delay workflow despite their low (or zero) monetary costs. Questionnaires about patient history of travel and staff encounters with disease-positive patients may disrupt workflow, but a few simple questions at check-in (eg, “Have you had contact with anyone who was sick in the past week?” or “Have you been on a cruise in the past 30 days?”) may gel with current practices.

Sanitation protocols for examination rooms may become more thorough. Given the relatively low cost and small likelihood that a detailed cleansing of high-touch surfaces in an exam room would disrupt patient flow, it seems possible that practice staffs will continue to wipe down rooms when each patient leaves.

Practice Layouts

Since the start of the COVID-19 pandemic, some retina practices have adjusted their patient flow structures. At Associated Retina Consultants in Phoenix, for example, family members remain in their vehicles and patients never double back to the same hallway. Patients move in one direction for their entire visit, which maximizes efficiency and reduces the likelihood of patient-to-patient transmission of an infectious disease. The feasibility of applying this convention to another practice location depends, of course, on the clinic’s available site and existing structure. This layout may be advantageous during annual flu seasons, too.

We have designated an isolated exam room in our office for patients who present with an urgent need for care and have been identified as positive for COVID-19. We may keep this room for similar use in the future.

Changes to practice footprint and patient throughput patterns require more deliberate action and investment than some of the easier changes I mentioned earlier. Practices with space to spare will find it easier to implement changes than practices that function in tight quarters. Bear in mind, these adjustments to our clinics could be useful to reduce the transmission of disease in future outbreaks, be they of coronavirus, flu, or another threatening entity. Groups that purchased the building in which

they practice may wish to keep this in mind. Without protocols in place, there may be profound consequences.

Physician and Staff Adjustments

Modifications in clinics are not limited to patients and architecture. Doctors and staff will see changes in routine if their practice makes serious adjustments. Some of these changes will be small, and others may require more time- and money-intensive resources.

Screening doctors and staff for fevers upon arrival to the clinic is a low-cost way to reduce the chance that transmission is spread from the clinic to a patient. Cross-training staff may be required for future employee training, as sending home a specialized staff member could disrupt the clinic’s workflow. Questions about how to replace a doctor—especially in a small or solo practice—will be more difficult to address.

Contact tracing for doctors and staff, should they test positive for an infectious disease, may require the clinic to retrace the steps of that employee. Whom did they contact? Which rooms were they in? How many patients must be notified? In many locations, local public health authorities may be able to assist. For larger groups with multiple practice sites, it may be prudent to avoid employee travel between offices during high-risk seasons. Although such action is disruptive to the clinic, it is necessary to ensure patient and employee safety.

CHANGES TO TREATMENT PARADIGMS

We often talk about the benefit of extended-duration treatments and the promises they hold. The thought many retina specialists used to have was this: If patients can go several months without visiting our practice while maintaining visual acuity and remaining safe, then they will be more likely to comply with treatment recommendations. Being able to serve more patients as a result of this would be a windfall. Now, we have to consider whether or not we reduce patient risk for disease exposure if we extend duration between treatments, for example, for wet age-related macular degeneration (AMD).

(Continued on page 45)

(Continued from page 37)

Some patients require monthly therapy and others do not. Those who are enrolled in prn regimens may be shifted to more targeted treat-and-extend (TAE) protocols. TAE regimens have been shown in wet AMD populations to significantly reduce treatment burden without adversely affecting visual acuity compared with monthly protocols¹ and have been shown to produce significantly better visual acuity results compared with prn regimens.² Given forecasted trends in population, perhaps TAE regimens will be sought sooner in some patients with wet AMD.

Some clinicians may be more inclined to leave small volumes of fluid as detected on imaging in wet AMD patients if it means that patients will have to attend fewer clinical sessions during heightened periods of infectious disease transmission. Patient treatment patterns will always remain a function of individual patient needs, but variables such as fluid volume may play a larger role going forward.

In patients with diabetic macular edema, use of long-acting intravitreal implants is often considered. Patients who do not fit the treatment profile for these therapies should be excluded from initial consideration, but some clinicians who have not considered steroid treatment in appropriate patients as a first-line therapy may be inclined to do so in a post-COVID world. Given the fact that diabetes is included among the underlying conditions that may exacerbate COVID-19 infections, clinicians should consider how they can best mitigate the risk of infection while still providing optimal ophthalmic care.

WHAT COMES NEXT?

It remains to be seen how the coronavirus will permanently affect retina practice. Perhaps the changes we have undergone will be fleeting and, in years to come, will seem like quirks from a bygone chapter of medical history. But I suspect that many of the changes we have already implemented will remain in some form, and that the framework we use to understand the interaction of infectious disease and retina care will become more symbiotic than siloed. ■

1. Wykoff CC, Croft DE, Brown DM, et al; TREX-AMD Study Group. Prospective trial of treat-and-extend versus monthly dosing for neovascular age-related macular degeneration: TREX-AMD 1-year results. *Ophthalmology*. 2015;122(12):2514-2522.

2. Augsburger M, Sarra GM, Imesch P. Treat and extend versus pro re nata regimens of ranibizumab and aflibercept in neovascular age-related macular degeneration: a comparative study. *Graefes Arch Clin Exp Ophthalmol*. 2019;257(9):1889-1895.

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