WHAT KEEPS ME AWAKE AT NIGHT?

Finding myself in a reflective mood when I began to write this editorial, and considering some of the topics covered in this issue of *CRST Europe*, I initially contemplated writing about areas in my practice that sometimes keep me awake at night—areas that may lead to patient harm, such as bilateral sequential surgery and retinal detachment following refractive lens exchange in myopes. But in the past week or so, the novel severe acute respiratory syndrome coronavirus 2 and the disease it causes, COVID-19, is the biggest news that really does keep me awake at night, so this is what I focus this editorial on.

As so often is the case, ophthalmologists lead the way. With the coronavirus, it is interesting that an observant ophthalmologist, Li Wenliang, MD, identified a cluster of affected patients with similar findings and tried to warn others of a new disease. Sadly, he contracted the condition from an asymptomatic (coronavirus-wise) acute glaucoma patient. He was, as many readers know, reprimanded by the Chinese authorities for spreading panic and false news. Unfortunately, Dr. Wenliang later died from the disease.

The Chinese Center for Disease Control and Prevention reported that men are more at risk of death from COVID-19 than women; the death rate in men is 2.8% and in women 1.7%. Of the 44,672 confirmed cases of COVID-19 in China at the time of this writing, 14% were classified as severe—involving serious pneumonia and shortness of breath. Another 5% were classified as critical—developing respiratory failure, septic shock, and/or multiorgan failure. The overall death rate among those 44,672 confirmed cases was 2.3%.[1]

Considering that sobering news, the reality is that we ophthalmologists and our technicians are at high risk of contracting this illness, given our close proximity to patients during slit-lamp examinations. Transmission can occur through mucous membranes, including the eyes, from droplet spread. The question is: What can and should we do to protect ourselves and our staff? Although the vast majority of those infected will be fine—many even asymptomatic—some will be more severely affected than others, including the elderly (many of our patients), those who are immunocompromised, and those with underlying respiratory illnesses. We should consider options to protect not only ourselves, but also our patients, many of whom are at considerable risk.

There are many unanswered questions about this disease. Why are some young individuals at risk of severe disease? Is there a genetic predisposition? One patient in Japan was found to be reinfected, having been diagnosed with COVID-19 in January, treated, and discharged, only to become symptomatic and test positive again in February. Was this an error of testing, dormancy, or reinfection?

Are any drugs effective against the virus? A recently published article cited in vitro benefits of chloroquine and remdesivir (Gilead Sciences),[2] a drug developed for the treatment of the Ebola and Marburg viruses. I remember taking chloroquine as malaria prophylaxis when I was growing up in Tanzania. The drug was withdrawn in most sub-Saharan African countries in the 1990s because malaria from *Plasmodium falciparum* became resistant to chloroquine and, in turn, through cross-resistance, negatively affected the efficacy of other drugs. It seems that *P. falciparum* is now becoming sensitive to chloroquine again,[3] and there may be a case for its reintroduction. Phase 3 trials of remdesivir against COVID-19 were launched in February, enrolling patients primarily in Asian countries.[4] This is encouraging, but it will be some time before remdesivir becomes available. As for a vaccine, that is probably 18 months to 2 years away.

If there are outbreaks of COVID-19 in the United Kingdom and Europe, it will make sense for health care workers who come into close contact with patients to wear eye protection and effective masks. I have been trying to figure out how to adapt a slit lamp and install an effective protective barrier between the oculars and the examination stage—a good project to consider. The small barrier that exists on some slit lamps is inadequate. Slit lamp breath shields are available, such as those from chinrestpapersource.com, but they are, in my view, still quite small and more effective at protecting the patient from our breath rather than the other way around.

In my practice, we have been following the UK Department of Health guidance: Before seeing each patient, we determine whether he or she is at risk of having the condition, for example, asking whether he or she has recently returned from an area where an outbreak has occurred and if he or she is or has been in close proximity to anyone with upper respiratory tract symptoms. Like many others, we are following events closely, and we hope the United Kingdom and Europe will not be too greatly affected. The question is: How far will the practice of containment go? Does it make sense to hold major conferences—health care conferences in particular—where there is a higher risk of potentially transmitting the virus?

I've posed a lot of questions to ponder. Sorry, I do not have the answers. In the meantime, I wish all of our readers, their families, and their staff members good health. Follow the advice on avoidance and disinfection practice. Stay safe in these uncertain times. ■

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