Developing a Red Eye Protocol for Managing Acute Conjunctivitis

Enacting the protocol prevents contamination.

BY SHACHAR TAUBER, MD

As a medical student, I had my first experience with red eye when I contracted adenovirus. I witnessed the infectious process firsthand as numerous people around me developed similar clinical findings. I was humbled by the fact that I, perhaps, was the starting point of the infection. That was when I knew there should be an easier way to detect adenovirus.

BACKGROUND

When the opportunity presented itself to research point-of-care testing for adenovirus in the clinic, I jumped at the opportunity. My colleagues and I wanted to verify the diagnostic efficacy of the Red Eye/Conjunctivitis Protocol using AdenoPlus (Figure) (Nicox, Inc.) and integrate the protocol into our practice. By getting involved with the early development of the protocol, I learned a great deal about the iterations of the device and have been able to make it part of my protocol when treating patients with a red eye that presents as an unknown entity.

MY PRACTICE

My ophthalmology clinic is part of an integrated practice with a primary care focus employing 1,500 doctors, multiple emergency departments (ED), and urgent care centers. Before a red eye patient is sent to our office, we have the luxury to request that he or she undergoes the AdenoPlus test in the ED or urgent care office. This helps us contain contamination. When a patient presents to our primary care doctor’s office, a nurse or medical technician can easily perform the test. If the result is positive, we can instruct treatment with a telephone call.

GOAL OF THE PROTOCOL

My primary goal with adopting the Red Eye Protocol is preventing contamination, and subsequently, an epidemic in my office, in the community, and in schools.

“I try to isolate patients as close to the front of the office as possible where they can do the least amount of damage.”

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If a patient has a positive test result, I can explain to him or her what to expect and what to prepare for. Specifically, the infection will likely spread to the other eye, is highly contagious, may get worse before it gets better, and will last 7 to 14 days. I schedule a follow-up appointment for a week later, but tell the patient to cancel if he or she feels there is improvement, further containing contamination.

From a broader standpoint, there has for quite some time existed a strong need for a point-of-care system for the rapid, differential diagnosis of acute red eye. Every day, these patients receive costly and unnecessary therapies designed to treat an often unclear disease state. For example, one of my patients developed a red eye and went to the ED at her local hospital. Because her signs and symptoms were dramatic, she underwent an incredibly intensive examination, which included a computed tomography scan, magnetic resonance imaging, and intravenous and oral antibiotics—all of which had no effect on her red eye. She then returned to the ED, and after an intensive workup, was sent home with more topical antibiotics. Finally, she called her primary care physician. Frustrated by her care, he referred her to our practice, where she was tested per the steps in the Red Eye/Conjunctivitis Protocol. The test was completed in less than 2 minutes, and the results were available in 10 minutes. We confirmed that the patient had adenovirus. From the point of view of saving health care dollars, this is a good example of how the protocol would have saved this patient and her health care providers the inconvenience and cost of several extensive workups and examinations.

CONCLUSION

I am highly impressed by the Red Eye Protocol, its early adoption by the American Academy of Ophthalmology, and its status as a 2006 preferred practice plan by pediatric groups. The protocol has also been validated by the pharmaceutical industry, which is using it in developing research protocols for the treatment of adenovirus. Ultimately, its potential for facilitating superior management of the conjunctivitis patient is evident by the confidence industry and health care providers have demonstrated in the protocol and in AdenoPlus as a crucial component.

Shachar Tauber, MD, is the section chair of ophthalmology and the director of ophthalmic research and telemedicine at Mercy Eye Specialists in Springfield, Missouri. He is a consultant to Nicox, Inc. Dr. Tauber may be reached at (417) 820-9393; shachar.tauber@mercy.net.