



***Therapeutic considerations  
in the treatment of  
external eye disease***

*To properly diagnose red  
eye, one must differentiate  
between infection, dry eye,  
and allergic conjunctivitis*

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# Therapeutic considerations in the treatment of external eye disease



**“Asia presents unparalleled challenges in the diagnosis and treatment of external eye disease.”**

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**A**sia presents unparalleled challenges in the differential diagnosis of the red eye and treatment of external eye disease. In more rural areas of Asian countries, laboratory workups are unavailable. Under those circumstances, clinicians are left to treat the red eye empirically. Furthermore, it is difficult to ascertain the etiology of the red eye; infection, allergic conjunctivitis, or simply dry eye could be among the causes.

In more metropolitan areas, better facilities may be available; however, research still is lacking. **Professor Donald Tan, M.D.**, Singapore National Eye Centre, cites observations on what little research we have to work with. Also, an understanding of the scale of the problem is vital to improving outcomes. **Jeewan S. Titiyal, M.D.**, head, cornea and refractive surgery service, All India Institute of Medical Sciences, New Delhi, India, notes that one million of the world's bilateral corneal blind are in his country, whereas 6 to 8 million people are bilaterally blind worldwide due to external eye disease.

To further contribute to our challenges, Asia is clearly not a monolithic region. The treatments for infection, allergic conjunctivitis, and dry eye vary widely. Furthermore, red eyes may be exposed to additional issues such as pollution, clearly a problem in metropolitan cities in Asia and a potential instigator of ocular allergy.

Given all the challenges, what are physicians in this region to do? How are they expected to treat the red eye? At times, wrong treatment is worse than no treatment. Additionally, the overuse of steroids can cause more severe problems and lead to elevated IOP or cataract formation. The clinician needs to understand this disease and the proper medical treatment.

Given the importance of this challenging question, we attempted to break down our regions' problems into case studies during Alcon's (Fort Worth, Texas) Education Summit in Siem Reap, Cambodia, this past August. What emerged were some excellent presentations, which we'll share with you in this series of articles.

These articles can speak for themselves, so I'll share with you just some of the treatment themes that have emerged from our panel:

- **OCULAR INFECTION:** The ideal ocular antibiotic should have a broad spectrum of activity, a rapid bactericidal effect, excellent ocular bioavailability, no toxicity, a low propensity for bacterial resistance, and a low incidence of allergic reaction. It shouldn't be an antibiotic of last resort. Fourth-generation fluoroquinolones exhibit these characteristics. Newer antibiotics are part of a spectrum of potential prophylaxis, and no one agent is expected to be a cure-all for any serious infection.
- **DRY EYE:** Dry eye is a common ocular surface disease. The function of the ocular surface is to aid normal vision and to provide comfort and a protective barrier. The key is to maintain a normal ocular surface pre- and post-operatively to maximize your surgical outcomes.
- **ALLERGIC CONJUNCTIVITIS:** In the treatment of allergic conjunctivitis, dual action anti-allergy agents are helpful that combine antihistamine properties with mast cell stabilizing activity.

Clearly, treatment is just the tip of the iceberg when it comes to properly addressing external eye disease. Correct diagnosis of the red eye is the key to proper medical management. Asia has a long way to go in doing this, but as we have learned a lot at the Education Summit, I hope that what we share with you will be helpful, too.

*Editors' note: Dr. Espiritu is vice chairman of ophthalmology at Manila Doctors Hospital, Manila, Philippines.*