

Dealing with allergy in the air

Ocular allergies are the top concern for many in the spring. Approximately one in six people worldwide has some kind of eye allergy, said Vincent de Luise, MD. Today practitioners prescribe everything from antihistamine mast cell-stabilizing agents to steroids, cyclosporine, and more.

While many are most familiar with seasonal allergic conjunctivitis (SAC), other vexing forms include perennial allergic conjunctivitis (PAC), vernal keratoconjunctivitis (VKC), atopic keratoconjunctivitis (AKC), and giant papillary conjunctivitis (GPC), Dr. de Luise noted.

Considering pathophysiology

Mast cells that release histamine and in turn attack certain receptors are at the heart of the problem. “In the conjunctiva, we have histamine H1 receptors that cause itching,” Dr. de Luise said, adding that there are also H2 receptors associated with redness, and H3 and H4 receptors that mediate the itch response. There can be prostaglandin issues as well. “Perennial allergy is similar but not quite as intense,” he said. Offending agents tend to include things such as household allergens, pet dander, and mites.

In diagnosing a SAC ocular allergy patient, it’s best to hear the word “itch” from them to make a diagnosis, he stressed. Otherwise, something else is likely going on, be it dry eye, conjunctivochalasis, filamentary disease, or superior limbic disease.

At the slit lamp, practitioners should be on the lookout for a red, watery eye, with clear, not purulent, discharge, as well as swelling, Dr. de Luise said.

Treatment options

Fortunately, there are a panoply of agents that can help these patients. Ira Udell, MD, pointed out that patients can get Zaditor (ketotifen fumarate, Alcon), an anti-histamine mast cell stabilizer, over the counter. This originally was a prescription agent that was approved to be used twice a day. “But if you take it once a day and it works, that’s fine,” he said, adding that he



Chemosis and redness associated with SAC

Source: Vincent de Luise, MD

usually starts with this agent and moves to other prescription agents in the class. “I’ll go to the olopatadines because they have three different concentrations that I can work with,” Dr. Udell said. These include the original Patanol (olopatadine 0.1%, Novartis), Pataday (olopatadine 0.2%, Novartis), and Pazeo (olopatadine 0.7%, Alcon), with both Pataday and Pazeo labeled for once-a-day use and Patanol labeled for twice-a-day use.

Other H1 selective antihistamine alone or with mast cell stabilizers include Bepreve (bepotastine besilate, Bausch + Lomb), Elestat (epinastine, Allergan), Lastacast (alcaftadine, Allergan), Optivar (azelastine, Medpointe Pharmaceuticals), and Zerviate (cetirizine, Nicox), Dr. Udell said.

Dosing can be an important difference among these agents, Dr. de Luise pointed out, adding that he tends to avoid Optivar, which needs to be taken three times a day. “We know from the glaucoma world that if we ask a patient to use a drop twice a day, there’s a 35% reduction in compliance over once-a-day dosing,” Dr. de Luise said.

The next step would be to consider a short trial of pulsing topical steroids. Practitioners today have safer ester steroids to use here. These include Alrex (loteprednol etabonate 0.2%, Bausch + Lomb) and Lotemax (loteprednol etabonate 0.5%, Bausch + Lomb). Ketone steroids are very powerful but have a higher risk of IOP rise and cataract formation than the ester steroids, he pointed out.

These days, Dr. Udell may move rapidly to steroid use. “If I see a very severe allergic reaction, I may start with that first,” he said. “If they tried Zaditor and haven’t had much of a

by Maxine Lipner
EyeWorld Senior
Contributing Writer

About the doctors

Vincent de Luise, MD
Assistant clinical professor
of ophthalmology
Yale University School
of Medicine
New Haven, Connecticut

Ira Udell, MD
Professor and chair
Department of ophthalmology
Donald and Barbara Zucker
School of Medicine at
Hofstra/Northwell
Hempstead, New York

Financial interests

de Luise: None
Udell: InFocus Capital Partners

Contact information

de Luise:
vdeluisemd@gmail.com
Udell: ijudell@aol.com

response, that gives me a sense that they may not respond to other agents.” If such a patient seems desperate, he may give them a steroid to quiet things down and transition them to other agents.

In some cases, sensitivity to the BAK preservative can be an issue. Dr. Udell has found that switching patients to a compounded, low-dose, preservative-free steroid such as dexamethasone can make it possible to use at a safer 1/10th concentration with excellent outcomes. “We have hundreds of these patients on preservative-free steroids where nothing else works,” he said.

Dr. de Luise pointed out that for some it may be possible to use Restasis (cyclosporine,

Allergan) off label. In drop form, this does not have the side effects of the oral version.

Dr. Udell noted that NSAIDs are approved for ocular allergies. While these reduce prostaglandin reactions, there are better medication options to consider. He views this class of medications as helpful as a possible adjunct to other allergy medications.

Still, there is room for more agents in the arena. Even with everything available, ophthalmologists don’t yet have the perfect drug, Dr. Udell noted. What patients ultimately want is something that acts quickly and lasts for a long time, a criterion he uses when evaluating any allergy medication. ●

continued from page 53

whether longitudinally this has any impact on the long-term graft failure.”

Investigators also found that the leading indication for full thickness procedures continues to be a failed graft, Dr. Gupta reported. Still, partial thickness procedures, which had accounted for about two-thirds of those in the initial study, in a short period of time were up to 85%. She said this could be attributed to improved visual outcomes, reduced astigmatism, and possibly fewer suture complications compared to penetrating keratoplasty. Dr. Gupta also credits surgeons’ growing experience with DMEK, which was new to many in 2013, with practitioners at the time facing a learning curve with the rapid growth of the procedure.

DSAEK’s popularity held in bullous keratopathy cases. “This has been shown to have less endothelial cell loss post-transplant,” Dr. Gupta said, adding that while such bullous keratopathy cases are still mainly treated by DSAEK, DMEK is gaining ground.

Results showed that the most common cause for corneal transplant was Fuchs’ dystrophy, which accounted for 42% of the transplants performed, with graft failure at 17%, and bullous keratopathy and keratoconus both at 15%.

In Dr. Gupta’s view, corneal transplantation has changed a lot. “Compared to a decade ago, there has been a huge shift,” she said. “In just the last 5 years, partial thickness has dominated compared to PKP, and although DSAEK was the procedure of choice for our most common pathologies, it’s now DMEK at the University of Toronto.”

While many surgeons already favor this, there is opportunity for further growth, she pointed out. Use of pre-cut donor tissue may be one such avenue. “If you remove the time that it takes for DMEK, in terms of OR time when you’re preparing corneal tissue and it’s ready to go, that’s a huge improvement and will help to increase adoption.”

Going forward, Dr. Gupta thinks more studies are needed to help determine whether new complications or changing impact on graft survival are going to emerge as a result of doing more DMEK. “I think another study similar to this in a few years will help give us some of the longitudinal data to understand whether the observed patterns have changed the outcomes,” she said. ●

Tips for palliative approaches

Not all patients need to take an eye drop or pill, Dr. de Luise said. Some can get relief by taking these steps:

- Keep windows closed in an area where there are a lot of allergens.
- Use cold compresses to reduce the histamine response.
- Clean air ducts.
- Purchase a new cold-mist humidifier every couple of years because these can accumulate dust, mold, and mites.