Rise in spring allergens linked to increased dry eye cases

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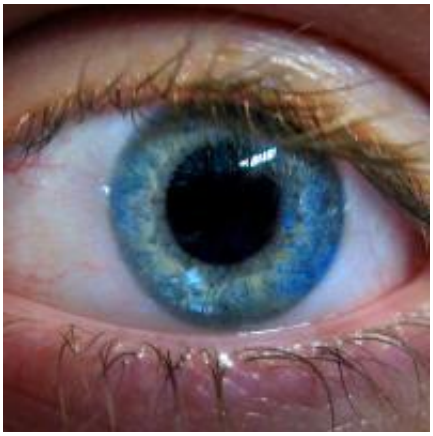

New ophthalmology research from the University of Miami shows that dry eye - the little understood culprit behind red, watery, gritty feeling eyes - strikes most often in spring, just as airborne allergens are surging. The study marks the first time that researchers have discovered a direct correlation between seasonal allergens and dry eye, with both pollen and dry eye cases reaching a yearly peak in the month of April. The paper was published online today in *Ophthalmology*, the journal of the American Academy of Ophthalmology.

Dry eye can significantly impact a person's quality of life by inducing burning, irritation and blurred vision. The common condition affects about 1 in 5 women and 1 in 10 men, and costs the U.S. health care

system nearly $4 billion a year. Though allergens may exacerbate dry eye in those who already have the condition and produce similar symptoms, allergies and dry eye have historically been viewed as separate conditions. The latest discovery that the two conditions are linked suggests dry eye sufferers may benefit from allergy prevention in addition to dry eye treatments like artificial tears. For instance, wearing goggles outside for yard work and using air filters indoors may stave off springtime dry eye, the researchers say.

They discovered the correlation between allergies and dry eye by reviewing 3.4 million visits to Veterans Affairs eye clinics nationwide over a five-year period between 2006 and 2011. During that time, doctors diagnosed nearly 607,000 patients with dry eye. Researchers also charted the monthly prevalence of dry eye compared to an allergy index over time and found seasonal correlations:

- A seasonal spike occurred each spring, when 18.5 percent of patients were diagnosed with dry eye. Another spike came in winter.
- Prevalence of dry eye was lowest in summer at 15.3 percent.
- April had the highest monthly prevalence of dry eye cases: 20.9 percent of patients seen were diagnosed with dry eye that month. This coincided with the yearly peak in allergens (including pollen), as measured by the allergy index recorded on pollen.com.

The research team hypothesizes that the winter rise in cases of dry eye may be due to low indoor humidity caused by people using heaters indoors without a humidifier to offset the dryness.

"For the first time, we've found what appears to be a connection between spring allergens like pollen and dry eye, but also saw that cases rose in winter," said lead researcher Anat Galor, M.D., MSPH, associate

professor of clinical ophthalmology at Bascom Palmer Eye Institute at the University of Miami. "Finding this correlation between dry eye and different seasons is one step toward helping physicians and patients treat the symptoms of dry eye even more effectively based on the time of year."

For more information on dry eye, visit the American Academy of Ophthalmology's public information website at http://www.geteyesmart.org.

Provided by American Academy of Ophthalmology