

Allergic Conjunctivitis in Urban and Rural Environments

To the Editor:

I read with interest the article by Forte et al.¹ The authors exclude the patients with a nonurban lifestyle to reduce the risk of conjunctival contamination from a rural environment. I disagree with this concept. Nonurban lifestyles and parasite infections are possible protective factors for allergic disease. Most urban environments increase the risk of such disease.²

Lastly, the prevalence of allergic conjunctivitis is more common in urban than in rural environments.²

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Allergic Conjunctivitis and Latent Infections

Reply:

We highly appreciate the comments of Dr. Kittisupamongkol on our recently published article.¹ We agree with the observations made by Dr. Kittisupamongkol that the prevalence of allergic conjunctivitis is more common in urban than in rural environments. In our study, only patients with an urban lifestyle were included, as they represent almost the totality of patients referring to our eye service.

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Safe Corneal Tissue Processing

To the Editor:

Lindquist et al.¹ describe environmental considerations to help keep the already low rate of infection attributable to keratoplasty donor tissue from increasing. Because many eye banks have augmented their traditional activities by providing prepared endothelial or lamellar corneal allografts, it is important, as the authors point out, for processing facilities to understand potential sources of airborne infection. However, the recommendation that acceptable levels of microbial contamination be measured “annually” seems too infrequent to accomplish a meaningful evaluation of the processing environment. According to the Eye Bank Association of America,² during 2008, eye banks provided 17,468 corneas for endothelial keratoplasty; 10,569 (61%) were “precut,” meaning they were prepared in advance at a tissue-processing facility. The remaining 6899 tissues were surgeon prepared in the operating room. Processing facilities prepared an additional 845 tissues for ALK, tectonic, or laser-assisted keratoplasty procedures. The 2007–2008 increase in endothelial keratoplasty procedures was 23%. To avoid an extended lag time between environmental monitoring and timely recognition of problems, eye bank quality assurance programs should

implement a monthly rather than annual assessment of airborne bacterial contaminants.

Eye bank processing procedures are more complex and riskier than those previously performed. These risks are not necessarily offset by use of high concentration perioperative antibiotics. Good tissue practices emphasize that cross contamination of donor tissue be avoided. Although Food and Drug Administration does not provide specific guidance for “open-container” aseptic processing controls, it is reasonable to infer that their guidance for other regulated arenas will be relevant.³ International Standards Organization Class 5 criteria recommend 1 colony-forming unit per 90 mm plate per 4-hour exposure as the action level for this classification.⁴ Monitoring methods do not always recover microorganisms present in the sampled area. Because false negatives can occur, especially in low-level environments, scientifically sound sample sizes, timing, and frequency should be selected. A trending program should anticipate unacceptable conditions. Environmental monitoring should occur under dynamic conditions, that is, during actual tissue-processing procedures. Finally, by strengthening aseptic controls, eye banks may reduce regulatory compliance scrutiny.

The evolution of sophisticated keratoplasty procedures and eye banking's contributing role benefit from contributions like those received from Lindquist et al.

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Safe Corneal Tissue Processing

Reply:

We thank Mr. Weber for his comments and agree that inadequate frequency of sampling airborne contaminants may delay recognition of potential problems. Eye banks and processing facilities need to perform environmental monitoring to insure that potential sources of airborne infection are minimized.¹ Passive sampling by the

use of sedimentation plates needs to be performed in proximity to the actual tissue being processed.^{2,3} Each eye bank, processing facility, or operating room needs to establish requirements for sampling that mirrors the frequency that tissue is being processed.

If microkeratome-prepared endothelial keratoplasty tissue is processed daily, then monthly or even weekly passive sampling may be appropriate. Under some circumstances, annual monitoring of an operating room where tissue is infrequently processed may be sufficient. The Medical Advisory Board of the Eye Bank Association of America intentionally refrained from establishing more stringent requirements for frequency of testing to allow each eye bank and processing facility the responsibility of determining

a reasonable frequency of airborne sampling.

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