trum, solely on the basis of in vitro results. The results of Kaye et al. suggest that these newer antibiotics, despite the claims, may not offer improved in vivo results against Streptococcus species. Because of this possibility, caution seems advisable when using monotherapy for any serious bacterial corneal ulcer. Instead, I prefer a topical fluoroquinolone (whichever agent) plus topical fortified gentamicin (13.6 mg/mL).

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References


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Author Response: Problems with Monotherapy for Bacterial Keratitis

We thank Dr. Guzek for his comments on our paper published in the January issue of the journal. There may have been some misunderstanding of our methods and findings. It should be noted that we analyzed separately those patients who received monotherapy and whose corneal ulcers healed and those who either received combination therapy or whose ulcers did not heal. In the combination group, a variety of combinations of agents were used including gentamicin and a fluoroquinolone. What we showed was the lack of an association between healing and minimum inhibitory concentration (MIC) when fluoroquinolone was used against streptococci, and in this group, we included only those patients with healed ulcers who had had monotherapy with a fluoroquinolone.

There are clearly many other factors that determine outcome in Streptococcus-associated keratitis, regardless of the antimicrobial used. For example, of the patients included with Streptococcus pneumoniae keratitis, one whose ulcer did not heal and who lost an eye had received combination treatment with ciprofloxacin (MIC, 0.75 mg/L) and teicoplanin (MIC, 0.032 mg/L). The MIC for gentamicin was 8 mg/L. Conversely, in a patient who received combination treatment with fluoroquinolone (MIC 0.75 mg/L) and gentamicin (MIC 24 mg/L) and second-line treatment with cefuroxime (MIC, 0.016 mg/L), the ulcer healed after 20 days, which was longer than the mean of 11.38 days (SD 6.54) in the pneumococcal group. Except for gentamicin, the expected corneal concentration (either chemical or bioassay) of the antimicrobials used in these two cases—ciprofloxacin, teicoplanin, and cefuroxime—was many times higher than the measured MICs for the isolated S. pneumoniae.

It is therefore important to demonstrate a relationship between healing and the MIC for gentamicin or other antimicrobial combinations before a particular antimicrobial such as fortified gentamicin is advocated on the basis of in vitro MIC.

Before an additional or combination antimicrobial can be advocated for streptococcal keratitis, it is necessary to demonstrate either additivity or synergy or at least absence of inhibition for that particular combination, as we have shown for Staphylococcus aureus and Pseudomonas aeruginosa. Naturally, although the use of fortified gentamicin has been well recognized, so has its toxicity to the corneal epithelium.

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The Effect of Bevacizumab on Human Tenon Fibroblasts in Ocular Wound Healing

We have read the paper "Antifibrotic Activity of Bevacizumab of Human Tenon’s Fibroblasts In Vitro" of O’Neill et al. (published in Recently Accepted Papers on June 23, 2010) with great interest. We would like to thank the authors for their interesting work and for referring to our paper. Unfortunately, our work has been erroneously cited with regard to the following points:

In the discussion of their paper (page 13, 2nd paragraph) the authors mention:

Li et al. found a single dose of 0.75 mg bevacizumab (0.03 mL of 25 mg/mL) given immediately after surgery significantly reduced the density of blood vessels and the number of inflammatory cells during the early stages of wound healing and reduced the collagen deposition in the later stages.

1. We injected a total volume of 300 μL (0.3 mL) instead of 0.03 mL; therefore, the dose and volume should be changed to: "... a single dose of 7.5 mg bevacizumab (0.3 mL of 25 mg/mL)...

2. We never observed (or reported) an effect of inflammation after a single injection of bevacizumab; therefore, the phrase "...and the number of inflammatory cells...

should be removed.

Therefore, we feel that this statement should be changed as follows:

Li et al. found a single dose of 7.5 mg bevacizumab (0.3 mL of 25 mg/mL) given immediately after surgery...