

### ANTIBIOTIC REGIMENS FOR TREATMENT OF PRESEPTAL AND ORBITAL CELLULITIS

#### Editor's Note

The following letter by Dr. Carl Vartian has brought to our attention the fact that Tables 1 and 2 in the article "Preseptal and Orbital Cellulitis" by Drs. Carlisle and Fredrick<sup>1</sup> (October 2006) may be interpreted by readers as treatment recommendations for these infections. We would like to clarify that the tables are a summary of historical approaches to these infections and are not current treatment recommendations. Dr. Vartian's letter complements the historical approach taken by the authors by reviewing current antibiotic recommendations. In response, Drs. Carlisle and Fredrick explain their approach to compiling the tables.

#### To the Editor:

The review of preseptal and orbital cellulitis by Drs. Carlisle and Fredrick<sup>1</sup> contains tables of proposed antibiotics that I believe to be outdated, given the emergence and spread of resistant pathogens. We are currently seeing rates of community-acquired methicillin-resistant *Staphylococcus aureus* (MRSA) exceeding 50% in some areas, and we can no longer rely on  $\beta$ -lactam antibiotics to treat seriously ill patients who may have staphylococcal infection. Likewise, the spread of penicillin-resistant *Streptococcus pneumoniae* has also resulted in a change of empiric therapy to include third-generation cephalosporins and, sometimes, vancomycin. *Haemophilus influenzae* type B has largely been eradicated by vaccination in early childhood, although nontypable strains are still occasionally encountered. Given the changes in microbiology and resistance, I believe that vancomycin should be considered a first-line agent as it is effective against MRSA, group A streptococci, and the pneumococcus. Newer agents such as daptomycin, linezolid, and tigecycline would also be expected to be effective given their activity against these gram-positive cocci. Ceftriaxone could be added for *Haemophilus* coverage until the results of microbiologic studies became available.

**Carl V. Vartian, MD**  
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#### In reply:

Tables 1 and 2 in our article on preseptal and orbital cellulitis were not intended as a list of recommended antibiotics for treatment of preseptal/orbital cellulitis but rather were a summary of agents advocated for use by various authors over the past 30 years. Dr. Vartian is correct in pointing out that the tables of antibiotics contain outdated regimens and would be better labelled as "Past Proposed Regimens." We compiled

the tables using a literature search of PubMed for all years available using the terms "preseptal," "orbital," and "periorbital" with and without the term "cellulitis" attached plus direct search of the *New England Journal of Medicine*, *Journal of the American Medical Association*, and the American Medical Association specialty journals. Referenced articles were subsequently reviewed and utilized. The articles referenced in Tables 1 and 2 reflect all articles identified that offered/suggested a specific regimen for antibiotics. We included every article that we identified to be inclusive and to reflect the fact that no definitive evidence for any one regimen has been published.

In the treatment of preseptal/orbital cellulitis, choice of antibiotics should reflect the likely causative agent and include coverage for gram-positive and gram-negative bacteria in most instances. MRSA should be considered in all infections where *S. aureus* may be the causative agent. As MRSA increases in prevalence, treatment for that particular agent should be considered and reflect local resistance patterns. A recent article recommends non- $\beta$ -lactam antibiotics for MRSA ophthalmic infections.<sup>2</sup>

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#### REFERENCES

1. Carlisle RT, Fredrick GT. Preseptal and orbital cellulitis. *Hosp Physician* 2006;42(10):15-19.
2. Rutar T, Chambers HF, Crawford B, et al. Ophthalmic manifestations of infections caused by the USA300 clone of community-associated methicillin-resistant *Staphylococcus aureus*. *Ophthalmology* 2006;113:1455-62.

### Letters to the Editor

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