Single-Dose Azithromycin for Trachoma

TO THE EDITOR: Solomon et al. (Nov. 4 issue) suggest that the ocular chlamydia that causes trachoma can be eliminated by a single mass antibiotic treatment. Two years after distributing oral azithromycin in a village, they identified only a single infection. Two years after distributing oral azithromycin, infection can be eliminated by a single mass antibiotic treatment; in some villages, infection was eliminated rapidly. The authors state that this finding "contrasts starkly" with the prediction of our mathematical model. Yes and no. We do predict that infection will eventually return after a single mass treatment. However, with 97.5 percent coverage of a moderately infected area, this return may take a long time. Our model predicts that less than 3 percent of persons will be infected at one year — and an even smaller proportion in this case, since Solomon et al. also distributed tetracycline ointment. Furthermore, this estimate is only an expectation (or average), and chance can have a large effect. We recently monitored 24 villages in Ethiopia after a single mass treatment; in some villages, infection was eliminated at two months, and in others it returned relatively rapidly. Unfortunately, the evidence so far suggests that, on average, infection returns after a single mass treatment, but to test this properly, one must look at more than one village.

Thomas M. Lietman, M.D.
Bruce Gaynor, M.D.
University of California, San Francisco
San Francisco, CA 94143-0944
tml@itsa.ucsf.edu

Travis Porco, Ph.D.
California Department of Health Services
Berkeley, CA 94704


THE AUTHORS REPLY: Two main factors differentiate our study from the model of Lietman et al. First, our primary outcome measure was an adjusted geometric mean of the ocular Chlamydia trachomatis load, determined with the use of a quantitative polymerase-chain-reaction assay. The model, in contrast, used the prevalence of active trachoma, which correlates poorly with chlamydial infection. Second, we reported that after high-coverage mass treatment, the load of infection dropped and then continued to fall for at least two years, whereas the model predicted that (in communities like ours, where the disease is mesoendemic) the prevalence of disease would double every four to eight months after a treatment-induced fall. Our results suggest that there may be a threshold level of infection, below which the transmission of trachoma ceases; its return might then depend on reintroduction from the outside by persons with heavy shedding of C. trachomatis. We agree that our data are from only a single community case study but note that six months after mass treatment, six Ethiopian villages studied by Lietman’s group had a prevalence of infection of

Thomas J. Walsh, M.D.
National Cancer Institute
Bethesda, MD 20892

Gerald R. Donowitz, M.D.
University of Virginia Health System
Charlottesville, VA 22908

Ben E. dePauw, M.D., Ph.D.
University Hospital St. Radboud
6525 GA Nijmegen, the Netherlands

Controlling Health Care Costs

TO THE EDITOR: In their recent articles on rising health care costs, economists Paul Ginsburg (Oct. 14 issue) and Joseph Newhouse (Oct. 21 issue) and presidential candidates John Kerry and George Bush (Oct. 28 issue) do not directly address the well-known fact that approximately 10 percent of patients account for 70 percent of costs. To control costs we must acknowledge this skewed distribution and honestly address the major factor driving costs: the growth of technology.

Managed care’s lack of candor undermined its efforts to control costs and led to patient backlash. Since rationing is politically untenable, government has retreated from these issues. And current efforts at patient cost-sharing with caps will not curb spending for those with high utilization.

However, in order to obtain basic health care, some patients are willing to accept limits on care. We need efficient insurance systems in which patients willing to accept such limits are linked with caring physicians who use innovative practice styles and consider both costs and benefits as they care for their patients. Although this approach may make some uncomfortable, it is both ethical and necessary.

Elmer D. Abbo, M.D., J.D.
University of Chicago
Chicago, IL 60637
elbo@medicine.bsd.uchicago.edu