

dependent,<sup>4,5</sup> so the continuous-infusion method proposed by Drs. Schneemann and Imhof seems counterintuitive. No clinical trial of continuous infusion has had sufficient power to demonstrate equal efficacy between continuous infusion and intermittent infusion of amphotericin B deoxycholate.

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1. Ellis M, Spence D, de Pauw B, et al. An EORTC international multicenter randomized trial (EORTC number 19923) comparing two dosages of liposomal amphotericin B for treatment of invasive aspergillosis. *Clin Infect Dis* 1998;27:1406-12.
2. Karp JE, Merz WG. Randomized trial of lipid-based amphotericin B for invasive aspergillosis in neutropenic hosts is an important step forward. *Clin Infect Dis* 1998;27:1413-4.
3. Walsh TJ, Goodman JL, Pappas P, et al. Safety, tolerance, and pharmacokinetics of high-dose liposomal amphotericin B (AmBisome) in patients infected with *Aspergillus* species and other filamentous fungi: maximum tolerated dose study. *Antimicrob Agents Chemother* 2001;45:3487-96.
4. Andes D, Stamsted T, Conklin R. Pharmacodynamics of amphotericin B in a neutropenic-mouse disseminated-candidiasis model. *Antimicrob Agents Chemother* 2001;45:922-6.
5. Van der Auwera P, Ceuppens AM, Heymans C, Meunier F. In vitro evaluation of various antifungal agents alone and in combination by using an automatic turbidimetric system combined with viable count determinations. *Antimicrob Agents Chemother* 1986;29: 997-1004.

## Single-Dose Azithromycin for Trachoma

**TO THE EDITOR:** Solomon et al. (Nov. 4 issue)<sup>1</sup> 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. The authors state that this finding "contrasts starkly" with the prediction of our mathematical model.<sup>2,3</sup> 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.<sup>3</sup> 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.

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1. Solomon AW, Holland MJ, Alexander NDE, et al. Mass treatment with single-dose azithromycin for trachoma. *N Engl J Med* 2004;351: 1962-71.
2. Lietman T, Porco T, Dawson C, Blower S. Global elimination of trachoma: how frequently should we administer mass chemotherapy? *Nat Med* 1999;5:572-6.
3. Melese M, Chidambaram JD, Alemayehu W, et al. Feasibility of eliminating ocular *Chlamydia trachomatis* with repeat mass antibiotic treatments. *JAMA* 2004;292:721-5.

**THE AUTHORS REPLY:** Two main factors differentiate our study from the model of Lietman et al.<sup>1</sup> 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.<sup>2</sup> 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

0 percent.<sup>3</sup> Modeling with the use of quantitative infection data would be a useful next step.

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1. Lietman T, Porco T, Dawson C, Blower S. Global elimination of trachoma: how frequently should we administer mass chemotherapy? *Nat Med* 1999;5:572-6.
2. Solomon AW, Peeling RW, Foster A, Mabey DC. Diagnosis and assessment of trachoma. *Clin Microbiol Rev* 2004;17:982-1011.
3. Melese M, Chidambaram JD, Alemayehu W, et al. Feasibility of eliminating ocular Chlamydia trachomatis with repeat mass antibiotic treatments. *JAMA* 2004;292:721-5.

## Controlling Health Care Costs

**TO THE EDITOR:** In their recent articles on rising health care costs, economists Paul Ginsburg (Oct. 14 issue)<sup>1</sup> and Joseph Newhouse (Oct. 21 issue)<sup>2</sup> and presidential candidates John Kerry and George Bush (Oct. 28 issue)<sup>3</sup> do not directly address the well-known fact that approximately 10 percent of patients account for 70 percent of costs.<sup>4</sup> To control costs we must acknowledge this skewed distribution and honestly address the major factor driving costs: the growth of technology.<sup>5</sup> Managed care's lack of candor undermined its efforts to control costs and led to patient backlash.<sup>6</sup> 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.

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1. Ginsburg PB. Controlling health care costs. *N Engl J Med* 2004;351:1591-3.
2. Newhouse JP. Financing Medicare in the next administration. *N Engl J Med* 2004;351:1714-6.
3. Bush GW, Kerry JF. Health care coverage and drug costs: the candidates speak out. *N Engl J Med* 2004;351:1815-9.
4. Berk ML, Monheit AC. The concentration of health care expenditures, revisited. *Health Aff (Millwood)* 2001;20(2):9-18.
5. Newhouse JP. An iconoclastic view of health cost containment. *Health Aff (Millwood)* 1993;Suppl:152-71.
6. Havighurst C. How the health care revolution fell short. *Law Contemp Probs* 2002;65:55-101.

**TO THE EDITOR:** Dramatic advances in medicine and technology have resulted in widespread benefits from lifesaving but expensive devices and drugs such as implantable cardiac defibrillators, drug-eluting coronary stents, and new chemotherapeutic agents. Interestingly, three of the four options for reducing rising health care costs proposed by Dr. Ginsburg would require people to obtain less medical care. If our society continues to reject limitations on health care acquisition, one reality must be faced by all: whenever technological advances occur, there are increased costs to individuals (for example, automobiles cost more than horses and buggies, televisions cost more than radios, and air travel costs more than rail travel). Our hope is that, over time, cost containment can occur as a result of three mechanisms: reductions in the price of technologies through free-market competition, medical-liability reform (which will reduce the practice of defensive medicine),<sup>1</sup> and the growth of information technology, leading to a more efficient system.<sup>2,3</sup> Until then, the American people must assume some personal responsibility for financing the most advanced health care system in order to continue to reap its benefits.

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1. American Medical Association. Medical liability reform: a compendium of facts supporting medical liability reform and debunking arguments against reform, December 3, 2004. (Accessed January 6, 2005, at <http://www.ama-assn.org/ama1/pub/upload/mm/450/mlrnowdec32004.pdf>.)
2. Kuperman GJ, Gibson RF. Computer physician order entry: benefits, costs, and issues. *Ann Intern Med* 2003;139:31-9.
3. New Democrats Online. Health information networks to im-