Garcia HH, Pretell EJ, Gilman RH, et al.: A trial of antiparasitic treatment to reduce the rate of seizures due to cerebral cysticercosis. *N Engl J Med* 2004, 350:249–258.

**Significance:** Neurocysticercosis is the most common cause of adult-onset seizures in the developing world. To date, no controlled trials have been performed to test the efficacy of antiparasitic treatment for seizure prevention in patients with viable cysts.

**Findings:** Between 1997 and 2000, 120 adult Peruvian patients with viable (defined as at least one hypodense vesicle visible on computed tomography [CT]) cysts were randomly assigned to albendazole and dexamethasone daily for 10 days or to matching placebos. Patients were followed for 30 months or seizure-free for 6 months off antiepileptic medications. Active therapy resulted in a 46% (nonsignificant) decrease in seizures but a significant 67% decrease in seizures associated with generalization. Treatment also resulted in a greater resolution of cystic lesions on CT. Therefore, albendazole decreases the number of generalized seizures in patients with viable parenchymal neurocysticercosis.

Bartolini A, Bartalesi F, Mantella A, et al.: High prevalence of acquired antimicrobial resistance unrelated to heavy antimicrobial consumption. *J Infect Dis* 2004, 189:1291–1294.

**Significance:** The emergence and spread of antimicrobial resistance has been acknowledged to be associated with heavy consumption of antibiotics in human and veterinary/agricultural settings, and decreased use in those settings has been emphasized as a method to curb resistance. This study suggests that more than just use plays a role in the emergence and maintenance of antimicrobial resistance.

**Findings:** In this study, Italian investigators evaluated antimicrobial resistance in commensal *Escherichia coli* in a remote Bolivian community with little antimicrobial use and only infrequent contact with other communities. The village is at an altitude of 1700 m, requiring a steep 3-hour climb from the nearest clinic. The investigators obtained stool swabs from 108 villagers on a single day (80% of the population). *E. coli* was pan-sensitive in 29 patients. The remaining samples revealed varying resistance patterns, including resistance to tetracycline (64%), ampicillin (58%), trimethoprim/sulfamethoxazole (50%), and chloramphenicol (41%). The patients were interviewed; only eight villagers had ever taken an antibiotic, only six had ever visited a clinic, and only four had ever been hospitalized. None of the local animals had received antibiotics. Although one can hypothesize occasional introduction of resistant bacteria into even highly isolated communities, with spread attributed to poor hygiene (the village has no plumbing), it is more difficult to explain the persistence in the seeming absence of selective pressure.

Rainer TH, Chan PK, Ip M, et al.: The spectrum of severe acute respiratory syndrome-associated coronavirus infection. *Ann Intern Med* 2004, 140:614–619.

**Significance:** Severe acute respiratory syndrome (SARS) is a recently described atypical pneumonia caused by a novel coronavirus that exhibited the potential for global spread. Until recently, available data have been insufficient to clarify whether subclinical or milder forms of SARS occurs.
**Findings:** This analysis included data from 1221 patients attending a SARS screening clinic in Hong Kong. Twenty-six percent (145 of 553) of patients had serologic evidence of SARS coronavirus infection. Of 910 patients managed as outpatients because of less severe symptoms, only six had serologic evidence of SARS. Five of these six had normal chest radiographs. Of hospitalized patients (190), 139 tested positive. Although these data suggest that subclinical SARS is uncommon, nearly 50% of the original patients had incomplete serologic data. Nonetheless, the clinical diagnosis of SARS at hospitalization had a sensitivity of 0.96 and a specificity of 0.96 when using SARS coronavirus serology as the gold standard for diagnosis.

Paul M, Benuri-Silbiger I, Soares-Weiser K, Leibovici L: **Beta lactam monotherapy versus beta lactam-aminoglycoside combination therapy for sepsis in immunocompetent patients: systematic review and meta-analysis of randomised trials.** BMJ 2004, 328:668.

**Significance:** The combination of beta-lactams and aminoglycosides is thought to be superior to monotherapy in select gram-negative and gram-positive infection with regard to outcome and prevention of resistance. However, this concept has been periodically questioned.

**Findings:** The authors reviewed randomized trials of beta-lactam monotherapy versus beta-lactam–aminoglycoside combination therapy for patients without neutropenia who fulfilled criteria for sepsis. The resultant analysis included 64 studies of 7586 patients from 1968 to 2001. There was no difference in all-cause fatality. No difference could be found in studies comparing the same beta-lactam or in studies comparing different beta-lactam components. No advantage was found for gram-negative infections (n = 1835) or *Pseudomonas aeruginosa* (n = 426). No difference in the development of resistance between arms could be detected. Nephrotoxicity was more common in the combination arms. This analysis certainly suffers from the challenges of combining data from a span of more than 20 years but raises additional concerns that the standard concept of double coverage (especially with aminoglycosides) rests on less solid ground than many think.