southern Arizona will be expanded in the coming years, and surveillance will continue for new dengue cases, imported or otherwise.

David M. Engelthaler, T. Michael Fink, Craig E. Levy, and Mira J. Leslie
Arizona Department of Health Services, Phoenix, Arizona, USA

References

To the Editor: The dispatch by Izurieta et al. (Emerg Infect Dis 1997;1:65-8) reporting exudative pharyngitis possibly due to Corynebacterium pseudodiphtheriticum was very interesting, especially with the resurgence of diphtheria in the former Soviet Union. However, I was somewhat surprised at the treatment received by the 4-year-old patient whose case is reported. Erythromycin is an effective antibiotic in diphtheria, but it is secondary in importance to diphtheria antitoxin. The presence of a thick grayish white adherent pseudomembrane, adenopathy and cervical swelling, and low grade fever should certainly provoke a high index of suspicion of diphtheria, especially in a child who has not received pediatric immunization. The diagnosis of diphtheria is primarily made presumptively on clinical grounds and confirmed by the recovery of toxigenic Corynebacterium diphtheriae by the laboratory. Antitoxin treatment cannot wait for laboratory confirmation. Prompt administration of antitoxin is important because diphtheria toxin binds rapidly and irreversibly to tissue sites. Delay in initiating antitoxin treatment is associated with increased incidence of myocarditis, paralysis, and death. Also, it would have been good practice to have placed this child in isolation until the diagnosis was established by the laboratory. The primary care physician in this case is indeed fortunate that the patient did not have diphtheria; the results could have been tragic.

Paul D. Ellner, Ph.D.
Professor Emeritus of Microbiology and Pathology, Columbia University College of Physicians and Surgeons

Reply to P.D. Ellner: We agree that diphtheria antitoxin should be administered promptly on the basis of a presumptive clinical diagnosis of respiratory diphtheria. Because laboratory confirmation may be delayed, the decision to treat with antitoxin and the dose of antitoxin must be based on the site and size of the diphtheritic membrane, the degree of toxicity, and the duration of illness (1,2). Respiratory diphtheria is rare in the United States. From 1980 to 1995, only 41 cases were reported (zero to five cases in any given year) (3). With this low incidence, the likelihood that a patient with membranous pharyngitis has respiratory diphtheria is low. In addition, membranous pharyngitis could be associated with infections by other organisms such as streptococci, Epstein Barr virus, Candida albicans, Borrelia vincenti, Herpes simplex virus, Arcanobacterium hemolyticum, nontoxigenic Corynebacterium diphtheriae, and Corynebacterium pseudodiphtheriticum as in the case we reported (4-10).

The diagnosis and clinical management of exudative pharyngitis with a pseudomembrane in a country where diphtheria is extremely rare
Letters

represent a dilemma for the practitioner. In weighing the benefits and risks of diphtheria antitoxin treatment, it is prudent to err on the side of using antitoxin.

H.S. Izurieta,* P.M. Strebel,* T. Youngblood,† D.G. Hollis,* and T. Popovic*
Centers for Disease Control and Prevention, Atlanta, Georgia, USA; and †Rogers Pediatric Clinic, Rogers, Arkansas

References