a different strain. In contrast, resistance emerged in six of the 36 mice that received cefazidime.

As the data above suggest, cefepime is less likely than cefazidime to select resistant mutants if used to treat an infection caused by a “cefazidime-susceptible” strain. However, the risk remains that resistance may emerge during the treatment of patients with high-density infections at sites where very high drug concentrations cannot be maintained. More clinical data are needed to assess the degree of this risk. Although the risk is probably low, it must be greater than that for the carbapenems. The class C β-lactamase of Enterobacter hydrolyzes cefepime much more efficiently than carbapenems. Consequently, when a cefazidime-susceptible strain of Enterobacter overproduces β-lactamase as a result of mutation, MICs of carbapenems are not increased, whereas those of cefepime are [4]. With this in mind, clinicians need to balance risk and benefit for each patient.

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References

Percutaneous Inoculation Tuberculosis

SIR—I read with interest the report by Genné and Siegrist [1] of primary inoculation tuberculosis of the thumb following a needle stick injury in a laboratory technician. In my own clinical practice, I have observed one similar laboratory accident, three cases of inoculation tuberculosis incurred during autopsies (prospector’s wart), and one case in a resident who stabbed himself with a needle used for thoracentesis in a patient with tuberculous pleurisy. Genné and Siegrist are correct in drawing the attention of clinicians to this problem.

One of the earliest recorded episodes of inoculation tuberculosis was reported by the French pathologist and pulmonary physician, R. T. H. Laennec [2]. Laennec, whose autopsy studies of tuberculous patients first demonstrated the unity of this disease as it occurs in various body organs, cut his index finger in 1803 while performing an autopsy on a patient with tuberculosis of the spine, and he developed a tuberculous lesion at the wound site. Laennec later wrote of this event, “Twenty years ago while I was examining some tuberculous vertebrae, a slip of the saw lightly grazed my finger. . . (8 days later) there appeared a crude, yellow tubercle. I cauterized it with hydrochlorate, the scar formed promptly, and I’ve never been aware of the slightest consequence of this accident” [2]. Laennec, who had a family history of tuberculosis and probably had clinical disease before his injury, died of pulmonary tuberculosis in 1826.

Inoculation tuberculosis mirrors the guinea pig experiments of Koch, who described what is today often known as the Koch phenomenon. In 1891, he described ulceration of the inoculation wounds of naïve animals, followed by dissemination of disease, and subsequently, death. However, the inoculation sites in tuberculous animals healed [3]. Laennec’s course, considered in light of Koch’s later experiment, indicates that he was already infected with Mycobacterium tuberculosis at the time of his injury.

No one would disagree with the recommendation of Genné and Siegrist for standard therapy for this form of extrapulmonary tuberculosis; I have treated it thus and would do so again. In fact, however, in many instances today inoculation tuberculosis is a form of primary tuberculosis with a small bacillary burden, and the disease would probably respond well to therapy with isoniazid alone.

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References

Cutaneous Infection Due to Mycobacterium gordonae in a Human Immunodeficiency Virus–Infected Patient

SIR—Rusconi et al. [1] recently reported a case of cutaneous lesions due to Mycobacterium gordonae in an HIV-infected patient. This interesting report provides additional information about the potential pathogenicity of this organism. However, contrary to the authors’ claim, this is not the first case of cutaneous disease
due to *M. gordonae* in a HIV-infected patient reported; a report of a similar case was published in 1992 by Bernard et al. [2]. *M. gordonae* was isolated from cutaneous lesions, blood cultures, bone marrow cultures, and articular aspirate from a 31-year-old HIV-infected woman who had fever, polyarthritis, and disseminated cutaneous lesions.

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