Letter to the Editor

Cefotaxime for Therapy of Acute Leptospirosis

Leptospirosis is an important zoonosis with a worldwide distribution, and there are some indications that the infection is becoming more prevalent in the United Kingdom in occupational groups exposed to farm animals. The antibiotic normally recommended for treatment of leptospirosis is benzylpenicillin. However, disappointing clinical responses have been observed after penicillin treatment, possibly because of an inadequate bactericidal effect, particularly in the kidneys and central nervous system. Recent in vitro studies have indicated that some of the newer cephalosporins possess much greater intrinsic activity against Leptospira strains than benzylpenicillin (2). This has been confirmed by studies in animals (1), but there appear to have been no reports on the clinical efficacy of these antibiotics in leptospirosis. Recently, we treated a patient with acute leptospirosis with cefotaxime.

The patient was a 22-year-old man who worked as a butcher. He was admitted to the hospital with a 7-day history of pyrexia, headache, and dry cough which developed 1 week after he cut his left index finger while at work.

On examination, he had a sustained oral temperature of 39°C but did not appear to be severely ill. His liver and spleen were not palpable, and there was no jaundice. His superficial lymph nodes were not enlarged. Breath sounds were vesicular with coarse crepitations at both bases. A chest X ray disclosed a mild patchy bilateral pneumonia. Hematological and biochemical assays gave results within normal limits. The results of serological tests against a range of viral and rickettsial antigens, Mycoplasma spp., Chlamydia psittaci, Legionella spp., and Brucella spp. were negative. The complement fixation titer for Leptospira group antigen was initially 1/8 but rose to 1/64 within 5 days. In view of this, the occupational history, and the clinical picture, the patient was diagnosed as suffering from acute leptospirosis.

On day 8 of illness, before the diagnosis was established, treatment was started with 1 g of cefotaxime given intravenously three times daily for 7 days. The patient’s temperature fell to 37°C within the first 24 h, and his symptoms rapidly resolved. He remained well after cefotaxime was discontinued.

Although this observation was confined to a single patient, the excellent response to cefotaxime was consistent with the exquisite in vitro Leptospira susceptibility to this antibiotic reported by Oie et al. (2). This suggests that more extensive evaluation of cefotaxime for the therapy of leptospirosis should be attempted.

LITERATURE CITED


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