

widely implemented. Compared with serology, PCR offers a great advantage: the capacity to confirm the diagnosis of leptospirosis with a high degree of accuracy during the first 5 days of illness.

■ DIFFERENTIAL DIAGNOSIS

The differential diagnosis of leptospirosis is broad, reflecting the diverse clinical presentations of the disease. Although leptospirosis transmission is more common in tropical and subtropical regions, the absence of a travel history does not exclude the diagnosis. When fever, headache, and myalgia predominate, influenza and other common and less common (e.g., dengue and chikungunya) viral infections should be considered. Malaria, typhoid fever, ehrlichiosis, viral hepatitis, and acute HIV infection may mimic the early stages of leptospirosis and are important to recognize. Rickettsial diseases, dengue, and hantavirus infections (hemorrhagic fever with renal syndrome or hantavirus cardiopulmonary syndrome) share epidemiologic and clinical features with leptospirosis. Dual infections have been reported. In this light, it is advisable to conduct serologic testing for rickettsiae, dengue virus, and hantavirus when leptospirosis is suspected. When bleeding is detected, dengue hemorrhagic fever and other viral hemorrhagic fevers, including hantavirus infection, yellow fever, Rift Valley fever, filovirus infections, and Lassa fever, should be considered.

TREATMENT

Leptospirosis

Severe leptospirosis should be treated with IV penicillin ([Table 184-1](#)) as soon as the diagnosis is considered. *Leptospira* are highly susceptible to a broad range of antibiotics, including the β -lactam antibiotics, cephalosporins, aminoglycosides, and macrolides, but are not susceptible to vancomycin, rifampicin, metronidazole, and chloramphenicol. Early intervention may prevent the development of major organ-system failure or lessen its severity. Although studies supporting antibiotic therapy have produced conflicting results, clinical trials are difficult to perform in settings where patients