



Tularemia is treated with gentamicin, tobramycin, streptomycin, doxycycline, or ciprofloxacin. Azithromycin is the drug of choice for cat-scratch disease. For individuals at risk for *E. rhusiopathiae* infection, the treatment of choice is penicillin or ampicillin or use of a third-generation cephalosporin or fluoroquinolone in penicillin-allergic patients.

Animal handlers with cutaneous anthrax infection require treatment with ciprofloxacin or levofloxacin. Cases of suspected bioterrorism must be reported immediately.

Marine Lacerations and Punctures

The treatment regimen for marine lacerations and punctures should include doxycycline and ceftazidime or a fluoroquinolone. Treatment of fresh water injuries should include a third- or fourth-generation cephalosporin (i.e., ceftazidime or cefepime) or a fluoroquinolone. If *M. marinum* is suspected, treatment with clarithromycin, minocycline, doxycycline, sulfamethoxazole-trimethoprim, or rifampin plus ethambutol is appropriate.

Human Bites

Patients who have human bite wounds without evidence of infection should receive prophylactic treatment with amoxicillin-clavulanate for 3 to 5 days. Closed-fist injuries require radiographic evaluation and consultation with a hand surgeon for possible wound exploration. Parenteral treatment with ampicillin-sulbactam or moxifloxacin is recommended.

Burn Wounds

Systemic therapy with antibiotics and antifungals are reserved for burn patients demonstrating signs of sepsis or septic shock. Infection due to mucormycoses requires liposomal amphotericin B.

Diabetic Foot Infections

Simple infections such as cellulitis are most often caused by group A streptococci or *S. aureus* and should be managed accordingly. If ulcers do not have purulence or inflammation, antimicrobials are not indicated. Severe limb-threatening infections require surgical evaluation and broad-spectrum antibiotic coverage because infection tends to include aerobic and anaerobic

organisms. Empirical therapy directed at *P. aeruginosa* is not usually necessary unless the patient has other risk factors. MRSA-active treatment is recommended for patients with a history of MRSA, when the local prevalence of MRSA is high in the community, or if the infection is severe. All wounds require adequate wound irrigation and débridement.

PROGNOSIS

Full recovery is expected for patients with simple SSTIs provided they receive appropriate treatment. For those who develop complications such as necrotizing fasciitis, the estimated mortality rate is between 30% and 70%. The prognosis is guarded for patients with multiple comorbidities and those who are immunosuppressed.

SUGGESTED READINGS

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