



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

NECROTIZING FASCIITIS OF THE HAND BY A POLYMICROBIAL INFECTION: A CASE REPORT AND REVIEW OF THE LITERATURE

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BACKGROUND: Necrotizing fasciitis is a rapidly evolving and aggressive infection of the skin and soft tissue characterized by widespread fascial necrosis. Early diagnosis and treatment is crucial to decrease morbidity and mortality in patients with this disease. We present the case of 51-year-old male with a necrotizing infection of his left hand successfully treated with multiple surgical interventions and a review of the published literature.

METHODS: A case of necrotizing fasciitis of the hand was fully reviewed including clinical course, relevant pathology and microbiology, and plastic reconstruction. Additionally, an extensive literature review using multiple online sources was performed to identify articles related to necrotizing fasciitis of the hand.

RESULTS: Necrotizing fasciitis (NF) is an aggressive infection of skin and soft tissue characterized by widespread fascial necrosis. It is characterized by its rapidly evolving and often fatal presentation. Immediate identification and treatment is needed to decrease the likelihood of a fatal infection. Current recommendations advocate antibiotic administration and early aggressive surgical debridement. Aggressive surgery is associated with significant morbidity, leaving patients with substantial tissue loss and complex wounds but remains the only chance of successful treatment.

CONCLUSION: Necrotizing fasciitis of the hand is a rare presentation of a life-threatening disease. The initial presentation of patients with necrotizing fasciitis can vary and progress rapidly. The diagnosis is often made clinically and the early use of laboratory and radiological data may be helpful. Once diagnosed, early treatment with broad-spectrum antibiotics and surgical debridement is critical. While often seen in immunocompromised, chronically ill patients, practitioners should suspect and rule out necrotizing fasciitis in healthy patients with atypical presentations. Even with prompt diagnosis and treatment necrotizing fasciitis is associated with a high morbidity and mortality.

