Emerging Opportunistic Stenotrophomonas maltophilia Infections in Burn Patients


Background
Bacterial infections remain the leading cause of death in burn patients. Stenotrophomonas maltophilia, is rarely responsible for community-acquired serious infections. However, it has been reported as a cause of life-threatening infections in immunocompromised patients, including burn patients.

Purpose
To determine the association of Stenotrophomonas maltophilia infection with poor clinical outcomes in burn patients.

Methods
Retrospective chart review from 2007-2014. Adult burn patients with S. maltophilia infection were identified and compared to an age, gender and burned total body surface area (TBSA) matched group. Demographic variables were analyzed and outcomes measure were compared between groups.

Results
Forty burn patients had documented S. maltophilia infection, most were male (90%), mean age was 41 years, mean burned TBSA was 50%. Eighty five percent of the infections were sensitive to trimethoprim/sulfamethoxazole (TMP/SMX), 75% to quinolones, 50% to ceftazidime and 44% to minocycline. No significant difference was noted in hospital readmissions or mortality between both groups. More importantly, patients with S. maltophilia infection had significantly longer length of stay (LOS) (53±47 vs 17±14 days) and more surgical procedures (6±4 vs 2±2).

Conclusions
S. maltophilia infection is associated with increased LOS and increased number of surgical procedures, as such, S. maltophilia should be considered a serious pathogen in the management and hospital course of burn patients. In addition, antibiotic resistance of S. maltophilia infection in burn patients is not uncommon, though most infections are sensitive to TMP/SMX.

References