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

ANTIBIOTIC CHOICE FOR CELLULITIS: COMPLIANCE WITH PUBLISHED GUIDELINES

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Introduction: Cellulitis is a common infection of the skin and subcutaneous tissue. Antibiotic choice during hospitalization and discharge for cellulitis is complicated by concern about antibiotic-resistant bacteria, resulting in use of anti-MRSA or broad-spectrum antibiotics. The Infectious Diseases Society of America has published guidelines for management of cellulitis, though whether these guidelines are implemented in practice is unknown.

Objective: The purpose of this study is to determine how antibiotic selection practices for treatment of cellulitis comply with IDSA guidelines.

Methods: A retrospective chart review of 67 patients evaluated by the dermatology team in the emergency department for cellulitis from 6/2016-6/2018.

Results: Patients were classified into purulent and non-purulent cellulitis and further into mild, moderate, and severe, according to guidelines. 51 patients had non-purulent cellulitis, and 16 patients had purulent cellulitis. In the hospital, only 5 (21.7%) of the patients with mild cellulitis received the appropriate penicillin, clindamycin, or cephalosporin treatment. 25.5% of patients with mild non-purulent cellulitis were discharged with TMP-SMX, against guidelines. Of the 36 patients with moderate non-purulent cellulitis, antibiotics followed guidelines in only 2 of 11 (18.2%) patients. 78.4% of patients with non-purulent cellulitis received a combination of anti-MRSA and a beta-lactam, while only 50% of patients with purulent cellulitis were treated with this combination (p=0.0291). 53 patients (79.1%) received vancomycin, and of this group, only 27 (50.9%) had purulent cellulitis of any severity or severe non-purulent cellulitis to warrant MRSA coverage.

Conclusions: Our preliminary results show that there is a gap between actual practice and published guidelines for managing cellulitis. Further education on antibiotic prescribing guidelines may improve unify treatment strategies and prevent adverse effects, such as C.difficile infections and the development of antibiotic resistance.