Antimicrobial Treatment for Non-Purulent Skin and Soft Tissue Infections

Skin and Soft Tissue Infections (SSTIs) are Common in the ED

Emergency physicians must decide on the choice of antibiotic and route of administration (PO vs IV) for treatment. Current guidelines on the optimal route of antibiotic delivery are based primarily on expert opinion with little supporting evidence.

What are the practice patterns of Canadian Emergency physicians for treating SSTIs?

The Study

Study Population:
All physician members of the Canadian Association of Emergency Physicians (CAEP).

National Survey:
61 question online survey assessing physician approach to SSTIs and perceived risk factors predicting failure with oral antibiotics.

Participants:
391 of 1060 emergency physicians responded to the survey (36.9% response rate).

The Results

1. Emergency physician respondents relied on clinical impression (97.4%) and patient comorbidities (87.7%) when considering IV antibiotics.
2. Cephalexin and cefazolin are the preferred oral and intravenous antibiotics to manage SSTIs, respectively.
3. Perceived high risk factors for PO treatment failure include crepitus, hypotension, severe pain, rapidly spreading erythema, and issues with compliance.
4. Management variability includes duration of oral antibiotic therapy, optimal time for reassessment following oral and IV therapy, and when treatment failure with oral therapy should be considered.

Conclusions

This survey highlighted the lack of consensus regarding the approach to managing non-purulent SSTIs and identified several perceived risk factors that could predict treatment failure with oral antibiotics.

94.4% of emergency physician respondents indicated that they would consider using a clinical decision rule to predict failure with oral antibiotics.

The findings of this study highlight the need for further investigation in the management of SSTIs in order to improve the physician approach to this common clinical presentation.

References:

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