Background
- Hospitals that due to S. aureus SSTIs increased 123% from 2001 to 2006
- Children (0-17 years) showed the highest increase in incidence, with hospitalizations increasing by 305% A study of two emergency departments of the 153 patients treated for an SSTI with incision and drainage (I&D) and/or an antibiotic course had a recurrent infection within 3 months
- The current standard of care for painful, moderate to severe SSTIs does not specify one preferred antibiotic for treatment
- Studies of efficacy of trimethoprim-sulfamethoxazole (TMP-SMX) versus clindamycin showed comparable clinical success
- A 2011 pediatric study found that TMP-SMX was associated with increased risks of treatment failure and recurrence
- A 2015 study found no difference in the efficacy of TMP-SMX and clindamycin

Purpose of this study: to compare outcomes tied to persistence between TMP-SMX and clindamycin as a first line treatment for abscesses in children

Methods
- Study Design: Retrospective analysis of patients prospectively enrolled in a multi-center RCT September 2001 – January 2015
- Study Definitions:
  - Persistence of infection: Enrolled patient presented to the ED with the chief complaint of an SSTI, after being prescribed an antibiotic for the same SSTI at least 48 hours prior to ED admission
  - Re-evaluation: Evaluation of SSTI by healthcare provider

Results
Independent Variable Known antibiotic prescribed at initial abscess evaluation (Visit 1)
- Race
- History of SSTI
- Location of abscess
- Comorbidities
- Past SSTI
- Age

Dependent Variable Persistence of infection at re-evaluation visit (Visit 2)

Indications
- Race
- History of SSTI
- Location of abscess
- Comorbidities
- Past SSTI
- Culture results

Statistical Analyses
- Race
- History of SSTI
- Location of abscess
- Comorbidities
- Past SSTI
- Culture results

Investigation
- Race
- History of SSTI
- Location of abscess
- Comorbidities
- Past SSTI
- Culture results

Conclusions
- Given significant risk for persistence to occur in children, clindamycin needs to be considered as the first line of treatment over TMP-SMX when SSTI is from a child <4 years of age, in the abscess located in buttock/inguinal area, and who has a history of prior SSTI.
- Limitations: small sample size, patient antibiotic compliance, did not control for severity

References

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