

Title: Evaluation of Antimicrobials for Uncomplicated Cystitis in the ED

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Introduction:

Uncomplicated cystitis is one of the most common bacterial infections in women and is responsible for 2-3 million ED visits annually. IDSA Guidelines were last published in 2011 and recommend antibiotics that currently have > 20% resistance rates in St. Louis. Due to this, the BJC Medical Group created an outpatient protocol to increase appropriate antibiotic prescribing for uncomplicated cystitis. However, this protocol has not been implemented at Christian Hospital. This study sought to review Christian Hospital's adherence to the BJC Medical Group's outpatient protocol for the treatment of uncomplicated cystitis in the ED; and to assess the need for similar guidance.

Methods:

This was a single-center, retrospective, observational study of 100 patients who met the pre-defined inclusion criteria. These patients received outpatient antibiotics for uncomplicated cystitis from the ED at Christian Hospital between January and June 2019. The primary outcome was the adherence to the BJC outpatient protocol for uncomplicated cystitis from the ED. Secondary outcomes include comparison of prescribed antibiotics to cultures to assess resistant therapy, incidence of prolonged duration of therapy, and incidence of fluoroquinolone use.

Results:

Christian Hospital's adherence to the BJC outpatient protocol for uncomplicated cystitis in the ED (drug, dose, & duration) was 9%. Comparison of prescribed antibiotics to urine cultures showed that 16% of antibiotics were resistant to the infection. Patients who received a prolonged duration of therapy was 81%; and fluoroquinolones were used in 23% of patients.

Conclusion:

Christian Hospital could benefit from adopting the BJC outpatient protocol for uncomplicated cystitis. This would decrease prescribing resistant antibiotics, ensure the appropriate duration of therapy, and decrease the use of fluoroquinolones.