

Evaluation of oral vancomycin use at a pediatric institution

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Background:

Vancomycin is a glycopeptide antibiotic which exhibits bactericidal effect through the inhibition of bacterial cell wall synthesis. Oral vancomycin is poorly absorbed into the bloodstream and is utilized for the treatment of *Clostridioides difficile* infection (CDI) in adult and pediatric patients. Updated CDI guidelines recommend vancomycin as a first line option for non-severe, severe, and recurrent CDI in adult patients; however, both metronidazole and oral vancomycin still remain as first line treatment options for initial, non-severe episodes in pediatric patients. Unfortunately, data comparing the effectiveness of oral vancomycin to metronidazole in pediatric patients is lacking. The primary objective of this evaluation was to characterize the inpatient use of oral vancomycin at Children's Mercy Hospital in patients diagnosed with a CDI.

Methods:

A retrospective review was conducted at Children's Mercy Kansas City for inpatients receiving oral vancomycin between June 1, 2017 and December 31, 2018. Basic demographics (age, weights, immunocompromised status, prior CDI history and treatment), current order information (formulation, strength, frequency, duration, recommending service, whether vancomycin was a home medication on admission), CDI episode diagnostic criteria (presence of a positive test, testing method, symptoms), CDI episode severity (laboratory and vital sign abnormalities, presence of toxic megacolon or ileus), and presence of concomitant antibiotics were collected. Patients who were admitted more than once and received inpatient vancomycin while on the same course of treatment were included as one course. These data points will be analyzed to assess the use of oral vancomycin as it relates to treatment of CDIs in a pediatric population.

Results:

Research in progress

Conclusion:

Research in progress

Additional Content:

Learning objective:

Classify the use of oral vancomycin as it relates to treatment of *Clostridioides difficile* infections in a pediatric population.

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