

POSTER PRESENTATION

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Antibiotic treatment of *Clostridium difficile* infection in children – a challenge in pediatric practice

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Background

In the last decade the incidence of *Clostridium difficile* infection (CDI) in children is progressively increasing and the pediatricians are faced with difficulties in the therapeutic approach.

Methods

We performed a retrospective study that analyzed the antibacterial treatment in CDI from the experience of a Pediatric Gastroenterology Department – Grigore Alexandrescu Clinical Children’s Emergency Hospital, Bucharest. Cases were identified through enzyme immunoassays for A toxin or for A and B toxin of *Clostridium difficile* in the stool.

Results

Between January 1st 2005 and July 31st 2014, 52 patients were diagnosed with CDI. A large number of cases (61%) were diagnosed in the age group 1 to 4 years. The sex ratio was M/F = 0.9/1. 36% of patients had community-acquired CDI. In mild/moderate forms metronidazole was administered as a first-line treatment in 32 (61%) cases and proved efficient in 25/32 (78.1%) cases; vancomycin was used and was efficient in 18 cases. In severe forms (7.7%), the association of intravenous metronidazole and oral vancomycin was the option of choice and this approach cured all these cases. We report 11 patients with recurrent CDI (21%); in these cases oral vancomycin was efficient for the treatment of the recurrence. In 3 cases

with a second recurrence rifaximin was the chosen therapy. Six out of 11 children with recurrent CDI had comorbidities (Hirschsprung disease, ulcerative colitis).

Conclusion

The majority of patients in the study group were 1 to 4 years aged children. One third of patients had community-acquired CDI. We consider that the failure rate for metronidazole treatment is small and thereby metronidazole may be recommended for the treatment of the first episode of mild/moderate CDI. The association of intravenous metronidazole and oral vancomycin remains the treatment of choice for severe cases.

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