Risk Factors for Community-Associated Clostridium difficile Infection in Children

Mark Weng, Centers for Disease Control and Prevention
Susan H. Adkins, Centers for Disease Control and Prevention
Monica Farley, Emory University
Catherine C. Espinosa, Atlanta Veterans Affairs Medical Center
Claire Reisenauer, Colorado Department of Public Health and Environment
Tory Whitten, Minnesota Department of Health
Emily B. Hancock, University of New Mexico
Ghinwa Dumyati, University of Rochester
Corinne M. Davis, Tennessee Department of Health
Lucy Wilson, Maryland Department of Health and Mental Hygiene

Only first 10 authors above; see publication for full author list.

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2283. Epidemiological Profile of Children Infected with Bordetella pertussis at Varela Santiago Children's Hospital: a Retrospective Study
Igor Ithago Queiroz, MD, PhD;1 Manuela Gomes, ms;2 Glysson Rosa, RN, MD, PhD;3 David Arooni, MD, FIDSA;4 Desiree Labeaud, MD, MS;5 Marcelo Varela Santiago

Background. Bordetella pertussis is a common respiratory pathogen in children. Clinical presentation of B. pertussis infection can range from asymptomatic to coughing paroxysms, which may result in hospitalization. Recent studies have described B. pertussis infections in children up to 18 years of age and have associated the decreased occurrence of the disease with the implementation of routine CT screening during pregnancy.

Methods. Anonymized banked sera (-80°C) and prospectively collected sera from children and adolescents in Brooklyn, NY, were tested for anti-CT IgG via a validated enzyme immunoassay. Serum samples were divided by collection years: Group 1 (1991–1995, prescreening) and Group 2 (2012–2015, post-screening). Infants <1 year of age were excluded due to interference of diphtheria, tetanus, and pertussis vaccine (DTP).

Results. 297 serum samples were identified (age range 1–20 years). 18.5% (54/297) of subjects ≤10 years of age in Group 1 tested positive for anti-CT IgG, while none tested positive in Group 2 (0/53). Children ≤10 years of age in the prescreening group (1991–1995) had relatively high rates of seropositivity, likely due to persistence of antibody from perinatal infection. There were no positive cases of CT infection in children ≤10 years of age in the post-screening group (2012–2015) and the high rate of prenatal screening (>95%) in this high-risk population suggest prenatal screening and treatment of pregnant women has been effective at preventing perinatal CT infection.

Disclosures. All authors: No reported disclosures.

2286. Risk Factors for Community-Associated Clostridium difficile Infection in Adults
Mark Weng, MD, MSc, FAAP;1 Susan H. Adkins, MD, MSc; Monica Farley, MD, MSc, FAAP;1 Anthony D. Fisher, MD; Mark M. Silverberg, MD, MSc, FIDSA;2 Catherine C. Espinosa, MPH, PhD;3 Claire Reisenauer, DVM, MPH, PhD;3 Tony Whitten, MPH;3 Emily B. Hancock, MS;5 Ghinwa Dumyati, MD, FSHEA;5 Corinne M. Davis, MPH, MS;5 Lucy Wilson, MD, ScM;5 Zinta G. Beldavs, MS;6

Background. C. difficile infection is a common cause of diarrhea in adults, with up to 90% of cases occurring in community settings. The rate of C. difficile infection has been increasing in recent years, and has been associated with multiple risk factors.

Methods. A retrospective review of hospital records was conducted to identify patients with C. difficile infection. Risk factors were identified and analyzed using logistic regression.

Results. 123 patients with C. difficile infection were identified. The most common risk factors included recent antibiotic use (80%), recent exposure to healthcare settings (70%), and prior history of C. difficile infection (40%). Other significant risk factors included age >65 years, obesity, and diabetes.

Conclusion. The risk of C. difficile infection in adults is multifactorial, and efforts to prevent and treat this infection should be directed towards these high-risk populations.

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The incidence rate of CDI was 17 per 100,000 children. Community-associated disease was defined as cases.

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**250. Pediatric Bacterial Infections: From A to Z**

California, 3Kaiser Permanente Division of Research, Oakland, California, 4Pediatric

**2012 – December 31st, 2016** at Kaiser Permanente Northern California. Children with no prior history of CDI were enrolled. The proportion of cases and controls who had a feeding tube (2.9% vs 0%; P = 0.06) or a recent exposure to gastric acid suppressants (6.1% vs 2.9%; P = 0.63) was significantly different.

**Conclusion.** High suspicion for recurrence must be maintained in multi-racial or non-Caucasian, Hispanic, Asian, or African American children and those with underlying rCDI for rCDI in children.

**Disclosures.** All authors: No reported disclosures.