Microbiology of Community-Acquired Diarrhea in Infants and Young Children in the United States: The National Pediatric Diarrhea Surveillance Study

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BACKGROUND

The microbiology of community-acquired pediatric diarrhea in the U.S. is not well described.

Design/Methods: Healthy children 6-36 months old were enrolled by their primary care physicians and followed for 6 months. Stool samples obtained at baseline and during diarrhea episodes were assayed for 20 potentially-causative bacteria, parasites, and viruses.

RESULTS: Rotavirus and enteric adenovirus were the most common pathogens identified in stool specimens (22% and 11% of diarrhea episodes, respectively). Other bacteria and parasites were rare: Aeromonas (0.3% baseline, 1.0% diarrhea), Campylobacter (0.2%, 0.7%), Cryptosporidium (0%, 0.5%), E. coli (0%, 0.2%), Salmonella (0.2%, 0%), LT1-producing E. coli (1.1%), Vibrio vulnificus (0.0%, 0.0%), Shigella flexneri (0.0%, 0.0%), and Yersinia enterocolitica (0.0%, 0.0%).

Conclusions: Vomiting is the only clinical symptom that is predictive of isolating a pathogen from the stool.