INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY MAY 2010, VOL. 31, NO. 5

SHEA-IDSA GUIDELINE

Clinical Practice Guidelines for *Clostridium difficile* Infection in Adults: 2010 Update by the Society for Healthcare Epidemiology of America (SHEA) and the Infectious Diseases Society of America (IDSA)

Stuart H. Cohen, MD; Dale N. Gerding, MD; Stuart Johnson, MD; Ciaran P. Kelly, MD; Vivian G. Loo, MD; L. Clifford McDonald, MD; Jacques Pepin, MD; Mark H. Wilcox, MD

Since publication of the Society for Healthcare Epidemiology of America position paper on *Clostridium difficile* infection in 1995, significant changes have occurred in the epidemiology and treatment of this infection. *C. difficile* remains the most important cause of healthcare-associated diarrhea and is increasingly important as a community pathogen. A more virulent strain of *C. difficile* has been identified and has been responsible for more-severe cases of disease worldwide. Data reporting the decreased effectiveness of metronidazole in the treatment of severe disease have been published. Despite the increasing quantity of data available, areas of controversy still exist. This guideline updates recommendations regarding epidemiology, diagnosis, treatment, and infection control and environmental management.

Infect Control Hosp Epidemiol 2010; 31(5):431-455

EXECUTIVE SUMMARY

This guideline is designed to improve the diagnosis and management of *Clostridium difficile* infection (CDI) in adult patients. A case of CDI is defined by the presence of symptoms (usually diarrhea) and either a stool test positive for *C. difficile* toxins or toxigenic *C. difficile*, or colonoscopic or histopathologic findings revealing pseudomembranous colitis. In addition to diagnosis and management, recommended methods of infection control and environmental management of the pathogen are presented. The recommendations are based on the best available evidence and practices, as determined by a joint Expert Panel appointed by SHEA and the Infectious Diseases Society of America (IDSA) (the SHEA-IDSA Expert Panel). The use of these guidelines can be impacted by the size of the institution and the resources, both financial and laboratory, available in the particular clinical setting.

I. Epidemiology: What are the minimum data that should be collected for surveillance purposes and how should the data be reported?

1. To increase comparability between clinical settings, use available standardized case definitions for surveillance of (1) healthcare facility (HCF)-onset, HCF-associated CDI; (2) community-onset, HCF-associated CDI; and (3) community-associated CDI (Figure 1) **(B-III).**
2. At a minimum, conduct surveillance for HCF-onset, HCF-associated CDI in all inpatient healthcare facilities, to detect outbreaks and monitor patient safety **(B-III).**
3. Express the rate of healthcare-associated CDI as the number of cases per 10,000 patient-days **(B-III).**
4. If CDI rates are high compared with those at other facilities or if an outbreak is noted, stratify rates by patient location in order to target control measures **(B-III).**

II. Diagnosis: What is the best testing strategy to diagnose CDI in the clinical laboratory and what are acceptable options?

5. Testing for *C. difficile* or its toxins should be performed only on diarrheal (unformed) stool, unless ileus due to *C. difficile* is suspected **(B-II).**

From the Department of Internal Medicine, Division of Infectious and Immunologic Diseases, University of California Davis Medical Center, Sacramento, California (S.H.C); the Research Service, Edward Hines Jr. Veterans Affairs Hospital, and Infectious Disease Division, Department of Medicine, Loyola University Chicago Stritch School of Medicine, Maywood, Illinois (D.N.G, S.J.); the Division of Gastroenterology, Beth Israel Deaconess Medical Center, Boston, Massachusetts (C.P.K.); the Department of Microbiology, McGill University Health Center, Montreal, Quebec, Canada (V.G.L.); the Division of Healthcare Quality Promotion, National Center for Preparedness, Detection, and Control of Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia (L.C.M.); the Department of Microbiology and Infectious Diseases, University of Sherbrooke, Quebec, Canada (J.P.); and the Department of Microbiology, Leeds Teaching Hospitals National Health Service Trust and Institute of Molecular and Cellular Biology, University of Leeds, Leeds, United Kingdom (M.H.W.).

Received February 4, 2010; accepted February 5, 2010; electronically published March 22, 2010.

 0899-823X/2010/3105-0001$15.00. DOI: 10.1086/651706