



Memorial Day - 2010

PIC QUESTION OF THE WEEK: 5/31/10

Q: What are the latest guidelines for the treatment of *Clostridium difficile* infection?

A: *Clostridium difficile* infection (CDI) is the most common cause of healthcare-associated diarrhea. The organism is also a prevalent pathogen in the community and more virulent strains are emerging. The Society for Healthcare Epidemiology of America (SHEA) and the Infectious Diseases Society of America (IDSA) have recently compiled new treatment guidelines for CDI. This extensive document places significant emphasis on the epidemiology and diagnosis of the disease. CDI is generally diagnosed based on the presence of severe diarrhea, a positive stool test for *C. difficile* toxins or a colonoscopic finding of pseudomembranous colitis, and recent administration of broad spectrum antimicrobials. The SHEA/IDSA guidelines for initial and recurrent episodes of CDI are included below. A previous PIC Question of the Week (11/10/06) provides some additional background information regarding recurrent CDI. The reader must refer to the SHEA/IDSA guideline for more detailed information on this important topic.

Treatment of Initial CDI*

Initial episode (mild or moderate)	metronidazole – 500 mg three times a day by mouth for 10-14 days
Initial episode (severe)	vancomycin – 125 mg four times a day by mouth for 10-14 days
Initial episode (severe, complicated)	vancomycin – 500 mg four times a day by mouth or nasogastric tube plus intravenous metronidazole, 500 mg every 8 hours; if complete ileus, consider adding rectal instillation of vancomycin

*adapted from Cohen, et al.; levels of severity defined in guidelines

Treatment of Recurrent CDI*

First recurrence	Same as initial episode
Second recurrence	vancomycin in tapered and/or pulsed regimen (e.g. vancomycin 125 mg four times a day for 10-14 days; 125 mg twice daily for one week; 125 mg daily for one week; and finally 125 mg every two or three days for 2-8 weeks)
Multiple recurrences	Although not specifically included in the guideline, some infectious disease specialists recommend vancomycin 125 mg four times daily for two weeks followed by rifaximin 400 mg twice daily for two weeks.

*adapted from Cohen, et al.; alternative regimens are also discussed in the guidelines

References

- Cohen SH, Gerding DN, Johnson S, et.al. 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). Infect Control Hosp Epidemiol 2010;31:431-55.

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