# Experts discuss benefits and risks of different guideline-approved treatment approaches for C. difficile infection

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A medical illustration of Clostridioides difficile bacteria, formerly known as Clostridium difficile, presented in the Centers for Disease Control and Prevention (CDC) publication entitled, Antibiotic Resistance Threats in the United States, 2019. Credit: CDC

In a new Annals "Beyond the Guidelines" feature, an infectious diseases specialist and a gastroenterologist discuss the benefits and risks of different treatment approaches for Clostridioides difficile infection (CDI). The experts consider clinical practice guidelines and provide rationale for how their recommendations may or may not fall within those guidelines.

All "Beyond the Guidelines" features are based on the Department of Medicine Grand Rounds at Beth Israel Deaconess Medical Center (BIDMC) in Boston and include print, video, and educational components published in *Annals of Internal Medicine*. A CME/MOC activity accompanies each article.

C. difficile is a bacterium that causes diarrhea and colitis and often occurs in patients who are taking or have taken antibiotics. Targeted antibiotic treatment is typically used for non-severe and severe infection while fecal microbiota transplantation (FMT) or colectomy are sometimes used for more fulminant cases. Although not a treatment for CDI, bezlotoxumab, an intravenous monoclonal antibody against C. difficile toxin, is sometimes used to prevent disease recurrence.

The Infectious Diseases Society of America/Society for Health care Epidemiology of America (IDSA/SHEA) and the American College of Gastroenterology (ACG) each recently updated guidelines on the management of patients with CDI with a few subtle differences.

For cases of non-severe disease, the IDSA/SHEA conditionally recommends fidaxomicin over vancomycin. The ACG does not state a preference between these two antibiotics; rather, it provides equally strong recommendations for vancomycin and fidaxomicin, as well as a recommendation to consider oral metronidazole in low-risk patients. The

IDSA/SHEA guidelines do not make any recommendation for or against FMT in fulminant disease but do highlight some of the potential risks.

In a strong recommendation, the ACG suggests consideration of FMT for fulminant disease refractory to antibiotics, especially in patients who are poor surgical candidates, noting that "careful donor selection and screening can mitigate the risk of infection transmission." The ACG's guideline makes a conditional recommendation for bezlotoxumab in primary disease in those deemed at high risk for recurrence.

In a conditional recommendation, IDSA/SHEA suggests this medication infusion for those with recurrent disease within the last six months, but separately also acknowledges the potential benefit for those with risk factors for recurrence "in settings where logistics is not an issue."

The experts discuss their treatment recommendations based on a specific case of Ms. C, a 48-year-old woman with severe infection. A video testimonial from Ms. C accompanies the discussion. Carolyn D. Alonso, MD, the infectious diseases specialist, largely agrees with IDSA/SHEA guidelines in her treatment recommendations for the case presented, while Jessica R. Allegretti, MD, MPH, a gastroenterologist, recommends care more closely aligned with recommendations from the ACG. These discussions and the accompanying videos are particularly useful to practicing clinicians because not all patient cases are straightforward. "Beyond the Guidelines" gives physicians tools to think critically when faced with challenging cases.

A complete list of "Beyond the Guidelines" topics is available at www.annals.org/grandrounds.

**More information:** Zahir Kanjee et al, How Would You Manage This Patient With Clostridioides difficile Infection?, *Annals of Internal Medicine* (2023). DOI: 10.7326/M23-0754