

C. Difficile Infection – 5 important pearls for Long Term Care Providers in 2023

Clostridioides difficile is a gram-positive anaerobic bacteria that forms spores and releases toxins. *C. diff* infection (CDI) has been a “difficult” one to defeat across the healthcare ecosystem. Spores live on surfaces for months, up to 50% of long-term care residents may be asymptomatic carriers, and both prevention and treatment recommendations have evolved quickly.

Keep in mind the following key points as we tackle this “difficult” infection together:

1. Infection Prevention

Contact precautions for all suspected CDI cases is essential. Do remember that foam may not adequately protect against spore spread. Hand washing is critical, both before and after entering a room. Also ensure that your environmental teams are using sporicidal solutions as part of the cleaning strategy.

2. Antibiotic Stewardship

Antibiotic use is a major risk factor for CDI, especially with these common culprits: clindamycin, fluoroquinolones, broad-spectrum penicillins, and later-generation cephalosporins. That said, any antibiotic use may increase risk. Antibiotics disrupt normal gut flora allowing colonized *C. difficile* bacterium to activate and replicate rapidly. Avoiding unnecessary antibiotics is essential not only for prevention but also for treatment of CDI. Stopping an offending antibiotic is a pillar of CDI treatment. Take a hard look at the medication list of your residents with suspected CDI and stop those not absolutely necessary for clinical care.

3. Early Diagnosis versus Unnecessary Testing

CDI should be suspected in a long-term care resident with at least 3 unformed stools in a 24-hour period, and it is often associated with nausea, bloating, and abdominal cramping. The American College of Gastroenterology provides expert guidelines for testing pathways, referenced below. An early index of suspicion is good medicine.

That said, the burden of a false positive test is high. Since many residents may be colonized without active infection, surveillance testing isn't effective. Furthermore, toxin may still be secreted after active infection ends - no need to test if symptoms have improved. Additionally, formed stool should not be sent for testing.

4. The evolution of CDI treatment

The IDSA recommends using fidaxomicin as a first line agent to treat CDI. Fidaxomicin is typically dosed at 200 mg twice a day for 10 days. Oral vancomycin is also an acceptable first

line treatment choice according to the ACG. Metronidazole may be an acceptable alternative in some very low-risk populations, but it is clearly trending toward inferiority.

Treatment failure or recurrent CDI may require an additional medication or a longer dose of antimicrobial. It is worth learning about bezlotoxumab, pulsed vancomycin, rifaximin, and fecal transplantation. Talk further with your gastroenterologist or infectious disease specialist.

5. Recognition of treatment failure, recurrence, serious and fulminant disease

Treatment failure and recurrent disease is common in the long-term care community, even with appropriate early diagnosis and treatment. Involve your gastroenterologist, infectious disease specialists, and pharmacist to partner in a treatment plan.

Do know that long-term care residents are at risk for severe or fulminant CDI, and care in these circumstances should be quickly escalated. Beware vital sign abnormalities, acute kidney injury, abdominal distention, or severe pain suggestive of a surgical emergency. Individuals with these signs and symptoms need immediate attention, resuscitation, and specialty care.

References:

<https://www.nejm.org/doi/full/10.1056/nejmra1403772>

<https://www.uptodate.com/contents/clostridioides-difficile-infection-in-adults-treatment-and-prevention>

<https://www.idsociety.org/practice-guideline/clostridioides-difficile-2021-focused-update/#null>

https://journals.lww.com/aig/fulltext/2021/06000/acg_clinical_guidelines_prevention,_diagnosis,.12.aspx