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Lifespan Lyme Disease Center

ANTIBIOTICS AND THE POSSIBILITY OF C. DIFFICILE

Antibiotics are used to treat many harmful bacterial infections. However, a large majority of the bacteria in your body are actually beneficial to your health. The problem with taking antibiotics is that they will kill the good (symbiotic) bacteria along with the bad bacteria. This leaves you susceptible to infections from other bad bacteria that may be able to survive the antibiotic.

One of these bad bacteria is called *Clostridium difficile* (*C. diff*). *C. diff* is a commonly occurring bacteria that lives in many environmental conditions such as soil, water, air, meat products, and animal feces. Some people already have it in their gut but do not show signs of infection because their symbiotic bacteria keeps *C. diff* at bay. However, when antibiotics kill off symbiotic bacteria, *C. diff* can use the opportunity to produce toxins that attack the intestine wall and form plaques of inflammatory cells that cause watery diarrhea. With increased antibiotic use, more aggressive strains of *C. difficile* bacteria are becoming more common. As a result, it is important that patients and their healthcare providers be informed about *C. diff*.

Patients are at a higher risk of developing *C. diff* if they have recently taken antibiotics, especially in large doses for extended periods of time (one reason the doctors at the Lifespan Lyme Disease Center do not usually prescribe long-term antibiotics). Older patients also have an increased risk of infection. Furthermore, *C. diff* infections are most commonly picked up in healthcare facilities where antibiotics are common and germs spread easily. This is why we want our patients to be informed about *C. diff* infection.

Symptoms of *C. diff* infection includes:

Watery diarrhea 3 or more times per day for more than 2 days and abdominal swelling or tenderness. The most dangerous result of this infection is extreme dehydration and resulting kidney failure, which is why this infection must be treated.

If you have symptoms, see your doctor, who can test for *C. diff* with a stool test. If you have *C. diff*, your doctor will prescribe an antibiotic that targets *C. diff* (metronidazole ((Flagyl)), vancomycin ((Vancocin)), or fidaxomicin ((Dificid)).

How to help prevent *C. diff*:

Taking a probiotic concurrent with any antibiotic treatment is recommended by many providers. This allows the continuous introduction of good bacteria to the intestine despite antibiotic therapy. Probiotics can be bought over-the-counter as pills in all drugstores. They can also be consumed in many natural foods such as yogurt. In particular, probiotics with a yeast call *Saccharomyces boulardii* can help prevent reoccurring *C. diff* infections.

Probiotics are found in several foods, the most common being yogurt. Probiotic foods also include sauerkraut, miso soup, soft cheeses, kefir, sourdough bread, and tempeh.

For more information about C. Diff visit:

<http://www.mayoclinic.org/diseases-conditions/c-difficile/home/ovc-20202264>

Works Cited

“C. Difficile Infection.” *MayoClinic.org*. Mayo Clinic, n.d. Web. 11 July 2016.
<<http://www.mayoclinic.org/diseases-conditions/c-difficile/home/ovc-20202264>>.
