Clostridium Difficile Infection

Clostridium difficile, referred to as ***c. diff*** in the medical community, is one of the most common hospital acquired infections. It was discovered in 1935 and named "*difficult clostridium*" because it was difficult to separate and grow in a laboratory. It is estimated that 2/3 of hospitalized patients may be carriers of the c. diff infection. Frequently, especially in the elderly this infection can cause significant illness and even death. When a patient is prescribed an antibiotic for any reason, such as a sinus infection or wound infection, and are then exposed to the feces of a patient with c. diff they may also become infected. This happens because the normal flora or "good bacteria" in the colon has been altered by an antibiotic allowing the "bad bacteria" or c. diff to infect and overpopulate in the colon. Pencillins, clindamycins or cephalosporins are the most common antibiotics associated with the c. diff infection but it can actually be caused by any antibiotic.

Some patients are chronic carriers who have no symptoms, but can infect others with the infection. Other patients will have symptoms that can vary from mild to severe. Common symptoms of c. diff are watery diarrhea, abdominal pain, and fever, which may occur in 1 to 10 days after taking the antibiotic. Often the infection reoccurs or is resistant to treatment. Severe symptoms occur when patients developed colitis, pseudomembraneous colitis and toxic megacolon. Usually these patients are referred to a gastroenterologist who specializes in the treatment of diseases in the stomach and colon.

Colitis associated with c. diff infection causes more serious symptoms. Patients experience a more profound generalized ill feeling, coupled with abdominal pain, nausea, loss of appetite, and up to 15 watery bowel movements a day. The colon may have patchy areas of redness when examined using a scope test.

Pseudomembraneous colitis is another complication of the infection. In addition to having the same symptoms as c. diff colitis, these patients will also have pseudomembranes, which appear as yellow or off- white plaques scattered through the colon and rectum.

The more severe although uncommon complication of c. diff is fulminant colitis. Patients who experience this complication require aggressive diagnostic and medical treatment.

Patients can experience high fever, bleeding, dehydration, perforation of the bowel and prolonged ileus. An ileus occurs when a portion of the bowel loses peristalsis and does not allow stool to be passed through. Consequently, a liquid stool pools and with it high numbers of bacteria can dilate the colon to twice its normal size. This complication is called toxic megacolon. Medication is used to treat fulminant colitis but surgery may be required to prevent perforation of the bowel.

Treating patients with c. diff requires specific stool testing, a variety of medications and may require a scope test to confirm colitis. Although caused in part by an antibiotic, another antibiotic called Flagyl, that is available at a generic, is prescribed to treat the infection. Often c. diff can be resistant to drug treatment requiring a very expensive antibiotic call Vancomycin. In certain cases both antibiotics may be used in rotation along with other medications that help to bind the bacteria to the stool and then pass out of the body with bowel movements.

What can you do to protect yourself? First, recognized the symptoms and conditions required to contract the infection. Second, a 1 part bleach and 10 part water solution is the best cleaning solution to kill spores. And last and perhaps easiest is handwashing. Washing with soap and water as opposed to alcohol hand wash solutions is the best method for stopping the spread of infection. So wash your hands and remind the health care workers providing you care to wash their hands.