Clostridium difficile Colitis

Colitis (inflammation of the colon) can occur as a result of infection with the bacterium Clostridium difficile (also known as C difficile and C diff). The disease results from disruption or removal of normal healthy bacteria from the colon by antibiotics. The C difficile bacterium produces toxins (poisonous substances) that attack the lining of the colon and can cause severe damage to the colon itself. More commonly, C difficile toxins produce diarrhea and abdominal discomfort. Unfortunately, it is resistant to most antibiotics. Complications of C difficile colitis include bowel perforation (a hole in the colon) and pseudomembranous colitis (patches of severe inflammation and pus in the colon). C difficile is one of the most common infections that are typically acquired in health care institutions, along with MRSA (methicillin-resistant Staphylococcus aureus) and VRE (vancomycin-resistant Enterococcus). Hand washing and disinfection, isolation of infected patients, and appropriate antibiotic use are the best ways to reduce spread of these types of infection. The March 4, 2009, issue of JAMA contains an article about Clostridium difficile colitis.

RISK FACTORS
• Treatment with antibiotics
• Hospitalization
• Nursing home residency
• Critical illness
• Immune system depression (such as cancer, steroid treatment, HIV infection)
• Age older than 65 years
• Disease of the colon (such as inflammatory bowel disease)
• Recent gastrointestinal surgery

SIGNS AND SYMPTOMS
• Diarrhea, often watery
• Fever
• Abdominal pain and cramping
• Nausea with or without vomiting
• Weight loss

DIAGNOSIS
Diagnosing C difficile colitis relies on the patient’s history of frequent diarrhea for several days, typically in a person who is taking or recently took antibiotics. A stool sample is tested for presence of C difficile toxins. Other tests may be required if complications are suspected, including blood counts, blood chemistry testing, abdominal x-rays, or computed tomography (CT) scanning.

FOR MORE INFORMATION
• Centers for Disease Control and Prevention
  www.cdc.gov
• National Institute of Diabetes and Digestive and Kidney Diseases
  www.niddk.nih.gov
• American Gastroenterological Association
  www.gastro.org

INFORM YOURSELF
To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA’s Web site at www.jama.com. Many are available in English and Spanish. A Patient Page on MRSA infections was published in the October 17, 2007, issue.