



Huntington Village Implant & Oral Surgeons

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Don't Miss Out on our Next Seminar!!

Thursday

Sept. 29, 2016

3 CE Credits

“Minimal Intervention, Maximal Outcome-Combining Old School Concepts w New School Technology”

Presenter:
Arthur Volker, DDS, MS

Registration Dinner
5:30 pm

Lecture
6:00 - 9:00 pm

Knights of Columbus

9A Hewitt Square,
East Northport, NY

This course is sponsored by the Suffolk County Dental Society, an ADA-CERP recognized provider of Cont. Ed. (CE) approved by the New York State Dental Association and a designated PACE Program Provider for the Academy of General Dentistry.



Infection Control Office Update

Please note that dental offices should have Annual Infection Control Updates conducted in their offices regarding the most recent OSHA major changes in labeling and other directives.

Our office has contracted with **Peter Mychajliw, DDS** who is a NYS DOH licensed Infection Control Trainer. You may wish to contact him at ic.trainer@optonline.net

This is not to be confused with the mandated relicensure course which has been given every four (4) years by our study club. The next relicensure course will be scheduled for 2018. The last one was given in 2014.

“Antibiotics: Clostridium Difficile Disease After Antibiotic Use”

Becher N, Sweeney MP, Bagg: Dentists, Antibiotics and Clostridium Difficile—associated disease. Br. Dent J 219:275-279, 2015

Clinical Significance: Dentists should be aware of the possible complication of *Clostridium difficile* — associated disease (CDAD) as a result of the use of antibiotics unnecessarily. Adhering to the antibiotic prescribing protocols is a necessary step to maintain the ability of antibiotics to treat infections effectively. Dentists are also responsible for ensuring that they and their staff maintain the highest standards of infection control personally and for their facilities.

Background: Dentists are known to poorly adhere to prescribing guidelines for antibiotics. These guidelines were put into place based on the discovery of the link between antibiotic prescriptions and the development of antibiotic microbial drug resistance, among other clinical problems. A complication of antibiotic use many dentists may be unaware of is the potential for CDAD. This disorder carries significant morbidity and mortality and incurs a significant financial burden for the health care system. The spectrum of CDAD in the community and the need to educate and inform dentists about this risk were discussed.

Antibiotic Prescriptions: Dentists most often prescribe penicillin or metronidazole for patients, but clindamycin and cephalosporins are also commonly prescribed. These are the forms of antibiotic most often associated with CDAD, so dentists should consider the potential risk of CDAD when considering giving patients antibiotics.

When antibiotics are given, they have a major impact on the bacteria that form the balanced ecosystem of the intestines. Factors that influence how an antibiotic influences gut flora include spectrum of action, degree of absorption, elimination route, and inactivation by enzymes or binding to body fluids or intestinal material. The destabilization caused by the antibiotic allows the opportunistic spore-forming pathogen *C difficile* to become established in the intestinal tract, which can cause CDAD. In addition, certain strains of *C difficile* are more commonly associated with increased morbidity and mortality. A resistance profile is also emerging with *C difficile* ribotype 027, so that standard treatments are becoming ineffective.

CDAD: Transmission of *C difficile* in dental settings is not well studied, but the surgery may act as a reservoir for spores through hand contact contamination by asymptomatic patients. Breaking the chain of infection will involve hand hygiene and appropriate cleaning and disinfection of the clinical setting. Hand washing should be done with soap and water, not alcohol-based hand rubs. Chlorine-based agents are significantly more effective than detergents in destroying the spores.

Risk factors associated with CDAD include antibiotic exposure, severe underlying disease, older age, and immune suppression. Clindamycin has been considered the main antibiotic of concern, but more recently fluoroquinolones and cephalosporins, especially the third generation, have been implicated.

The clinical presentation of CDAD varies from being asymptomatic to being systemically ill, with pseudomembranous colitis (PMC), potential bowel perforation, and death. Onset is usually within 49 days of beginning the course of antibiotics. The most common symptoms among those with mild to moderate disease are watery diarrhea three or more times per day for two or more days, mild abdominal tenderness and cramps. With more severe disease, patients become dehydrated and can require hospitalization. Colon inflammation occurs, causing the development of patches of raw tissue that bleed and produce pus (PMC). With these severe levels, the patient may experience 10 to 15 episodes of watery diarrhea a day, abdominal cramps and pain, blood or pus in the stool, fever, nausea, dehydration, loss of appetite, weight loss, swollen abdomen, kidney failure and increased white blood cell count. Diagnosis is based on an initial test for the toxin gene using a nucleic acid amplification test, then a sensitive toxin enzyme immunoassay. Imaging of the colon is generally reserved for cases where other pathologic conditions may exist, laboratory results are inconclusive, or the patient's clinical status worsens.