

Sample Article Summary

Summary

A potentially deadly bacteria is spreading its way through hospitals in the US, Canada, and Europe. This bacteria *Clostridium difficile* is anaerobic (oxygen-shunning) and lives in the intestines. When antibiotics are used to treat various illnesses, the bacteria which are otherwise held at bay explodes in numbers in the intestines. The symptoms of the increased numbers of bacteria range from none to simple diarrhea to toxic mega-colon. The mega-colon is the result of a very large, inflamed colon that can become necrotic. The overuse of antibiotics over the years has contributed to the increase of these “superbugs”. Even the use of hand sanitizer over regular soap and water use has caused an increase in the bacteria. Hospitals that switched back to regular hand washing have seen a decrease in the spread of *C. difficile* in the hospital.

One patient, Mrs. Krovacs, a 65 year-old female came into the hospital with severe diarrhea and weakness that had been lasting for several days. It was determined that she had been on an antibiotic called Clindamycin for a tooth infection, which is a well-known antibiotic that can cause the signs and symptoms Mrs. Krovacs was experiencing. Her doctors worked hard to treat the infection, but she succumbed to the complications including gallbladder infection, pneumonia, and internal bleeding. If she had arrived at the hospital earlier or gotten more of a warning from her dentist that prescribed the antibiotic she might have survived.

Opinion

The article taught me about the significance of over prescribing antibiotics for things like viruses. The doctors and hospitals are creating so many antibiotic resistant bacteria that it is causing more and more of an issue. It is scary to think that something as simple as treating a tooth infection can cause such detrimental outcomes. I wonder what other disease we are creating because of the overuse of antibiotics.

I thought it was interesting that scrubbing hands with regular soap and water was the best way to get rid of bacteria on your hands. Most people, and especially at hospitals, use the hand sanitizer to clean their hands. I know I used hand sanitizer when I went to see my niece when she was born. I learned in the article that the gel doesn't always kill over the bacteria spores. We might still be spreading bacteria around without even knowing it.

Connections

The article has many connections to content learned in Anatomy. The digestive and lymphatic systems are two systems that relate to the article. The digestive system is composed of the mouth, esophagus, stomach, small intestines, and large intestines (including the colon). Its job is to breakdown our food for nutrients. The entire digestive tract is lined with a mucous membrane that helps move food along and helps protect us from invading bacteria. The lymphatic system or immune system helps fight off infections. Macrophages are used in nonspecific defense and lymphocytes (B and T cells) are used in specific defense. B cells work in humeral immunity and release antibodies, while T cells work in cellular immunity and engulf bacteria to rid the body of the infection.