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A Recipe for a Medical Disaster

What if you were hired to be the devil's advocate and you were assigned the job of formulating a fail-proof recipe for a medical disaster? How exactly would you go about that? While there are surely many other ways to approach this assignment, here's one way to go about it:

One of the best ways to accomplish that goal would appear to be to find a way to easily spread antibiotic-resistant bacteria, aka "superbugs", and to do it in such a way as to keep the project under the radar of medical regulatory agencies such as the CDC and the FDA. Because some of the most difficult-to-treat antibiotic-resistant bacteria are found in the intestines of patients, an obvious means for accomplishing this would be to fabricate one of the most invasive medical devices ever made to allow a clinician to peer at least part way down into a patient's small intestine, and take biopsy samples from there, if desired. And it should be designed so that it is not only extremely difficult to clean, but virtually impossible to reliably sterilize. Ironically this description fits the endoscopes currently used for the invasive procedure known as endoscopic retrograde cholangiopancreatography (ERCP). ERCP allows a clinician to examine the bile ducts, pancreatic duct, and gallbladder of a patient.

And in order to maximize the odds of success, cleaning and sterilization procedures for this impossible-to-consistently-clean-and-sterilize device would need to be exempt from scrutiny by any independent testing labs or any government regulatory agency, lest someone might attempt to intercede before extensive and wide-spread damage could be done.

Then after the program was well under way, and the first reports of instrument contamination-induced infection of other patients in subsequent exams began to come in, it would be important to keep the details of the actual extent...
Did You Know?

1. Microscopic colitis is not rare, nor was it ever rare, as gastroenterologists claimed for several decades - they simply failed to diagnose the disease because they didn't understand it so they didn't look for it.

2. Microscopic colitis is actually about as common as Crohn's disease.

3. The most recent research shows that microscopic colitis is approximately 60% more common than celiac disease.

4. Hippocrates, considered to be the father of modern medicine, pointed out roughly 2,500 years ago that "All disease begins in the gut." One would hope that modern medical science considers Hippocrates' contributions when diagnosing diseases.

5. The most common forms of microscopic colitis (collagenous colitis and lymphocytic colitis) have been known to segue to the other form of the disease and sometimes back again, seemingly at random.

6. The diagnostic markers of microscopic colitis can often be found in the small intestine and even in the stomach, in addition to the colon, though many physicians are unaware of that fact.

Of the problem under wraps for as long as possible in order to guarantee that as many patients as possible might have an optimal opportunity to become infected.

And as ridiculous as this fictitious scenario may seem, it has already happened, and the real life event appears to fit all the specifications that were outlined. Patients at hospitals all over the country continued to be infected as exams using these contaminated scopes continued as though everything was hunky dory for almost 3 years after the problem was initially discovered.

According to a report recently issued by the Senate Health, Education, Labor, and Pensions Committee, titled, "Preventable Tragedies: Superbugs and How Ineffective Monitoring of Medical Device Safety Fails Patients" (Senate Minority Staff Report, 2016), the company that manufactures approximately 85% of the duodenoscopes used in this country was aware of the problem for almost 2 years before it notified the FDA.

So what did the FDA do with this news? Apparently nothing (of any significance). The "watchdog" of public health waited approximately 17 months before notifying hospitals and medical professionals of the risk. According to the Senate report, during that 17-month period at least 68 additional patients at numerous hospitals scattered across the U.S were infected with antibiotic-resistant bacteria as a result of medical procedures in which clinicians used contaminated duodenoscopes. Does anyone at the FDA actually care about patient safety?

The full Senate report can be downloaded at the link below:

Preventable Tragedies: Superbugs and How Ineffective Monitoring of Medical Device Safety Fails Patients

Smoking and Microscopic Colitis

In reading the statistics regarding the prevalence of Microscopic Colitis, this affliction appears to occur most frequently to people aged 50 to 70 and more often to women than to men. This age group entered early adulthood in the 1960s-1970s. In this era, smoking was a socially acceptable habit. In 2016, smoking is strongly discouraged and most individuals in the 60+ age group have proudly given up the smoking habit. Could cessation behavior be responsible for the age onset of this condition? Could the fact that a smaller percentage of younger adults currently smoke result in a decrease in future cases of microscopic colitis?
Persky in his book Microscopic Colitis, cites "terminating a long-term smoking habit" as having "triggered many cases of the disease." (Persky, 2012, p. 18) In this book, he also points to the fact that "no empirical evidence suggests that smoking resumption might resolve the symptoms of this disease." Persky also cites studies that show that nicotine is "protective of ulcerative colitis and...it can actually be used to resolve symptoms in many patients." (Persky, 2012, p. 39) Finally, Persky reminds the reader that "Stopping a long-term smoking habit is known to cause extreme stress. It's rather obvious that stress is the key that explains the development of microscopic colitis that is sometimes connected with ending a long-term smoking habit." (Persky, 2012, p. 211) Is it possible that stress plus smoking cessation are two culprits that join forces to cause this condition to emerge?

A 2012 study published by PubMed.gov (Yen et al., 2012) concluded that cigarette smoking is a risk factor in the development of microscopic colitis in both sexes.

Mayo Clinic's (2016) online description of microscopic colitis includes the following: "Recent research studies have shown an association between tobacco smoking and microscopic colitis, especially in people ages 16 to 44." (Mayo Clinic, 2016)

Another PubMed.gov study by (Vigren et al., 2011) concluded that smokers are diagnosed with microscopic colitis, 10 years before non-smokers.

A 2014 study by the BMC Women's Health (Bodil, Gustafsson, Jeppsson, Manjer & Ohlsson, 2014) and published by NCBI concluded that former smokers are more predisposed to experience transient microscopic colitis and that current smokers have a greater likelihood of experiencing persistent microscopic colitis. This study did not show an association between alcohol consumption and MC or IBS.

The literature appears to support the mainstream medical opinion that smokers develop microscopic colitis at a younger age and that unlike with ulcerative colitis, smoking worsens microscopic colitis. This literature search produced more questions than answers and additional research is needed.

References

Mayo Clinic, Microscopic colitis symptoms and
Processed foods may increase likelihood of developing autoimmune disease.

The Microscopic Colitis Foundation website includes a Research Tab with a sub title: What's New. This page covers summaries of recent news articles based on research that may be of interest to microscopic colitis patients, caregivers, and medical professionals.

News stories about medical research, treatments, or living with the disease are discussed at this link.

Gastroenterology Research of America is offering microscopic colitis trials to patients. Click Here for Details.

Stress and IBD: Part II

While the effects of stress on the human body have been studied in-depth, it wasn't until recently that researchers examined physiological evidence of the counter-effects of stress management practices that elicit the relaxation response. (Emory, 2011) Initially coined by Dr. Herbert Benson, Associate Professor of Medicine Harvard Medical School, the relaxation response describes physiological changes while in a state of relaxation. Benson's studies revealed that dramatic positive physiological changes occur during meditation. Within the last year, scientists concluded that "the relaxation response reduced the expression of a number of genes directly linked to the key inflammatory processes of IBD." (Stahl J, Dossett M, LaJoie A,
But what is meditation and how do I begin? Meditation is attaining a resting state of consciousness where the mind is clear and relaxed. There are hundreds of different meditation approaches in the world such as Mindfulness, Guided Meditation, Transcendental Meditation, Sound Meditation, Zen and Om Meditation. The best approach is one that fits with your personality, lifestyle and inspires you to practice regularly. Live and Dare provides an excellent guide for beginners that highlights 23 different types of meditation with instructions, pictures and further reading. (Giovanni, 2016)

References

Emory M, Dr. Herbert Benson on the mind/body connection. 2011; Brain World. View Article

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Thanks for Reading!

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Microscopic Colitis Support Forum

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