Consults

Experts on the Front Lines of Medicine

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When Ulcer Drugs Don’t Work

By THE NEW YORK TIMES

Last week on the Consults blog, Dr. Neena S. Abraham, a gastroenterologist at the Michael E. DeBakey V.A. Medical Center and associate professor of medicine at the Baylor College of Medicine in Houston, took readers’ questions about ulcers, a potentially life-threatening condition increasingly tied to Nsaid pain relievers. Here, Dr. Abraham responds to readers who had questions about drug treatments for ulcers.

Pain and Bloating, Despite Antibiotics

Q.

I was diagnosed with a duodenal ulcer two weeks ago — H. pylori type — and have been on the PrevPac since we got the blood test results. I have taken the meds — PPI, clarithromycin and amoxicillin — per directions, along with a 50 billion count probiotic. But, I feel no better. I’m still getting the grabbing pain in my upper abdomen, and have the burping and bloating, only a bit diminished.

Re: additional twinges in my lower abdomen, after my annual GYN, ultrasound showed no irregularities. No problems with upper abdominal organs either – liver, kidneys, gall bladder. I’m awaiting a call back from my doctor’s office, to see if she has any further recommendations. Any thoughts about this?
Susan

A.

Dr. Abraham responds:

There are two important things to remember about antibiotic regimens to clear the H. pylori bacteria. First, ensure you take the prescribed medication exactly as prescribed. That means not missing doses and taking the full prescription to the end of the pills.

The standard first treatment for H. pylori is triple therapy and is commonly prescribed by primary care providers because of its simplicity and ease. Triple therapy consists of 7 to 14 days of the antibiotics amoxicillin and clarithromycin, taken in combination with an anti-acid pill known as a proton-pump inhibitor.

Second, if you have failed to clear H. pylori but you did take the medications as prescribed, it is possible that you have resistance to one or both of the antibiotics used in the initial triple therapy. Metronidazole and clarithromycin resistance is now on the rise in the United States as a consequence of the excessive use of these antibiotics to treat upper respiratory tract and sinus infections, and due to patients failing to follow-through and complete their antibiotic treatment regimens as prescribed.

Remember, when you fail to complete your full course of antibiotic therapy, you decrease your chances of eliminating the bacteria from your system. This sets up the perfect environment for the more hardy bacteria to establish a foothold. These bacteria then become resistant to antibiotics, and alternative regimens such as bismuth-based quadruple therapy, or the newer strategy of sequential therapy, in which you take several antibiotics one after another, becomes the next step to attempt eradication.

Finally, it is possible that your symptoms may be caused by functional dyspepsia. Usually, functional dyspepsia is a diagnosis of exclusion, in which your physician will work with you to exclude other conditions that may be causing your symptoms, including ulcers, acid reflux and, rarely, malignancy.

In 60 percent of patients with functional dyspepsia, no structural or biochemical explanation will be found for your symptoms. Although H. pylori-related inflammation of the stomach lining can be a cause of symptoms, eradication of the bacterium and complete healing of the stomach inflammation may not eliminate symptoms in some patients. I would encourage you to speak further with your doctor regarding your case.

Triple Therapy vs. Sequential Therapy for Ulcers

Q.

I was diagnosed with a duodenal ulcer two months ago due to H. Pylori. Since then, I was put on Prevpac for 14 days. Exactly 4 weeks after completing the prescribed medication, I was told that I still had H. Pylori in my system. I am now on quadruple therapy consisting of metronidazole, tetracycline, Prilosec and Pepto-Bismol.

I did some research online and found that triple therapy, Prevpac, has a success rate of 78 percent, while quadruple therapy has a success rate of 82 percent. If the Prevpac didn't work for me, what are the odds that quadruple therapy will work?
Susan

A.

Dr. Abraham responds:

If you took your initial triple therapy according to your doctor's instructions and still failed to eliminate your H. pylori, it is likely that you are resistant to the clarithromycin in the Prevpac.

Clarithromycin resistance is a growing problem in the United States, and consequently, eradication rates for H. pylori using clarithromycin-based therapies have dropped to 70 to 85 percent.

Your ability to clear the infection is also diminished if you took the clarithromycin-based regimen for only 7 days instead of 14. The odds of eliminating your H. pylori with a quadruple based therapy are pretty good if you are not resistant to metronidazole.

After failing triple therapy, there are a number of options available to clear the infection. Bismuth-containing quadruple regimens for 7 to 14 days are the usual next step. The objective with persistent H. pylori infection is to avoid antibiotics in the second treatment course that the patient has previously taken.

The eradication rate for bismuth-based treatment regimens is about 76 percent, and this strategy is popular in the United States as it is easily accessible, cheap and relatively effective. The downside to this strategy is the sheer number of pills you must take (up to 18 pills per day) and the side-effects, such as a metallic taste in the mouth and occasional loose stools (easily remedied with an over-the-counter anti-diarrheal). It is also important to remember not to drink alcohol with the quadruple therapy, as it will make you feel very sick to your stomach.

In Europe, two other strategies to eliminate persistent H. pylori infection have been popular. One is levofloxacin triple therapy, which consists of a PPI (proton-pump inhibitor) along with amoxicillin and levofloxacin. This regimen has been reported to eliminate up to 87 percent of persistent H. pylori infections.

The other is sequential therapy, in which medication regimens are given one after another. In Italy, sequential therapy with five days of treatment with a proton-pump inhibitor and one antibiotic (usually amoxicillin), followed by five days of treatment with a proton pump inhibitor and two other antibiotics (usually clarithromycin and a metronidazole-like drug) has been popular and shown to be more effective than triple therapy for eliminating H. pylori infection.

What is unique about this strategy is the way the antibiotics are delivered. Instead of giving all the antibiotics at once, this strategy starts with amoxicillin, which has a relatively low antibiotic-resistance rate, and then follows with two additional antibiotics that have a variable rate of resistance, depending on the population. It is thought that by starting with amoxicillin, the H. pylori organism is weakened, and then by following up with the additional two antibiotics you can still eliminate H. pylori even if some degree of resistance to metronidazole or clarithromycin exists.

This is a complicated and evolving field. My suggestion is to speak with your physician about the best strategy for you.