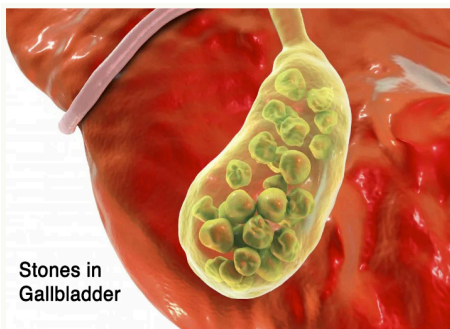


Diarrhea After Gallbladder Surgery

by ROBERT FUSCO, MD

Sally, a 53 year-old secretary, was seen in our office recently complaining of a “nervous stomach.” It seems that her bowel habit changed drastically over the past two years. Normally she had a regular routine of one formed bowel movement each morning - right after breakfast. Lately, she had been having four or more watery bowel movements throughout day, often right after meals. When asked she denied any changes in her diet, weight loss, or rectal bleeding. Her gallbladder was removed in the past. Often she would skip breakfast and lunch to prevent diarrhea when shopping or going out with friends. She stated that she knew the location of every public restroom in her county. She had seen her family doctor who suggested she try Imodium which was not very helpful.



The above case history is suspicious for post-cholecystectomy, “bile salt” diarrhea. This is an uncommon, but well-recognized, complication of gallbladder surgery. This short article was written to explain what this condition is and how it is treated.

A shock to your system

All abdominal surgery is a shock to your system. But, in most cases, these changes are temporary and improve within a few weeks of the operation. Some individuals, however, are troubled by persistent diarrhea after their gallbladder is removed. The symptoms may vary, but most patients complain that they often experience urgency and watery diarrhea shortly after eating. The diarrhea may even force them to stop and head for the closest bathroom before they finish the meal. This is especially embarrassing when it occurs at work or when dining out with friends. Many patients with this problem become reluctant to eat away from home.

Bile is the culprit

Bile is a thick yellow fluid made by the liver. It helps you digest the fat in your diet. Between meals, liver bile is stored in the gallbladder,



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a little sac beneath the liver. When you eat, the gallbladder squeezes and releases the stored bile salts into the small intestine to help with digestion. After food is digested and absorbed, the bile is reabsorbed at the end of the small intestine and recycled to be used over and over again. When the gallbladder is surgically removed, the liver must make more bile, and more is released between meals because there is no place to store it. The increased amount of bile can sometimes overwhelm the small intestines' capacity to reabsorb them. The excess spills over into the large intestine, or colon, where bile acts somewhat like a laxative, leading to diarrhea.

Can this be prevented?

It can't. Why some patients develop this side effect after gallbladder surgery and others do not is still a mystery. The exact risk is not well studied but estimated to be about 5% of patients. Unfortunately, there is no way to predict before surgery who will develop this problem afterwards. Having this side effect does not reflect on the skill of the surgeon or how the surgery was done. It is really just bad luck. Fortunately, the vast majority of patients do not develop bile salt diarrhea after gallbladder surgery.

How does your doctor know?

Since there is no specific diagnostic test for this condition, your doctor must confirm his suspicion that bile salt diarrhea is the culprit by ruling out other possible causes of diarrhea such as infection, colitis, cancer, and others. To do so the doctor will ask questions about your health history in general and specifically about the change in bowel habits. A physical examina-

tion is then performed. Special tests of blood and stool samples may be requested. In most cases, the doctor will need to examine the lining of the colon with a "scope" test such as colonoscopy to be sure that colitis and cancer are not present. Every case is a little different and it is the doctor's job to determine which tests are necessary to confirm the diagnosis.

How is this treated?

There is no cure for this problem, but treatment is available. Once it has been established that too much bile is the problem, treatment is usually prescribed to lessen the symptoms of diarrhea and urgency. The mainstay of treatment is a powder called cholestyramine resin (Pronunciation: kole ESS tir a meen). This medication is primarily marketed as a drug for patients with high blood cholesterol. It comes as a powder that is mixed with about 6 ounces of water. Several formulations are available. It also comes in a tablet form called Colestid.



Much like a chemical "sponge," this medicine lowers blood cholesterol by trapping and inactivating bile salts in the intestine, preventing their reabsorption. By trapping bile, cholestyramine also helps patients with bile salt diarrhea. The dose required to treat this condition varies, but most individuals only require one dose a day usually right before lunch.

Precautions

Of course, one should not take cholestyramine if constipated. Cholestyramine can decrease the effectiveness of other drugs if they are taken too close to one another. Other medications should be taken at least 1 hour before or 3 hours after taking a dose of cholestyramine. Cholestyramine may decrease the absorption of some vitamins. Individuals who take this medication regularly should simply take a multivitamin capsule every morning.

Is there a cure?

Not at this time. While some individuals do get better over time, most patients who have bile diarrhea that persists longer than 3 months after gallbladder surgery have it for life. It can usually be controlled with treatment. However, as soon as the cholestyramine is stopped, the diarrhea quickly returns. The whole goal of treatment is to prevent attacks of diarrhea and make their life normal again. Life is too short to let one's "bowels run their life."

Sally's tests of blood and stool were normal as was her colonoscopy. There was no sign of infection, colitis, or cancer. She was then begun on one packet in water before lunch daily. Within a week, her bowel habits went back to normal and she is no longer afraid to go at her favorite restaurant.

