



Weight Loss Surgery and Gallstones

Gallbladder disease is common. 10-20% of U.S. adults have gallstones. These can exist with or without symptoms. Those who have weight loss surgery may be at greater risk for gallbladder disease due to a decreased dietary intake and rapid weight loss. Your bariatric surgeon can help you understand your individual risk for gallbladder disease following surgery and which preventative or treatment options best suit your situation. As a partner in your healthcare management, prepare yourself with a good basic understanding of the disease, risks, and treatment options before talking with your surgeon.

Let's start with a very basic review of the gallbladder and its function. The gallbladder is found just under the liver. It is a small sac which stores bile that has been produced in the liver. When food or beverages containing fat are consumed, the gallbladder contracts to release bile into the small intestine. Bile brings the fat into suspension with water so that enzymes can work on it to break it into smaller components that can be absorbed and utilized by the body. Bile moves from its storage sac (the gallbladder) to the small intestine through tubes that are called the cystic duct and the common bile duct.

Gallbladder Disease Terminology

Gallstones are rocklike formations that occur inside the gallbladder. The stones form when there is an imbalance or change in the composition of the bile produced by the liver.

Cholelithiasis is the medical term that describes the presence of gallstones in the gallbladder.

Asymptomatic Cholelithiasis is the presence of gallstones without any symptoms. 60-80% of gallstones are asymptomatic.

Gallbladder sludge is crystallization of bile without the formation of stones. It can be a step in the formation of stones or just exist without gallstones.

Cholecystitis is the inflammation of the gallbladder that occurs when gallstones block the cystic duct leading from the gallbladder to the small intestine.

Biliary colic is the pain that occurs when the gallbladder contracts in response to a meal and the bile is restricted by a stone blocking the cystic duct. It usually begins within an hour of eating and may last for 1-5 hours. The pain is in the right upper quadrant and can radiate to the right shoulder or back. Nausea or vomiting may also occur.

Choledocholithiasis is the term that describes the presence of a stone in the common bile duct.

Cholecystectomy is the removal of the gallbladder.

Ursodiol (Actigall)/ Chenodiol (Chenix) are drugs that have the potential to dissolve cholesterol gallstones ((80% of stones are this type). The downside to these medications is that it may take years for gallstones to completely dissolve and they may come back if the medication is discontinued.

The rapid weight loss from dieting or following bariatric surgery increases gallstone formation. If you have not had your gallbladder removed prior to pre-admission testing (about 2 weeks prior to bariatric surgery), an ultrasound will be performed to identify the presence of any gallstones or sludge. If gallstones are detected, the surgeon will discuss treatment options. Treatment may include laparoscopic removal of the gallbladder prior to bariatric surgery, laparoscopic removal of the gallbladder at the time of bariatric surgery, open gallbladder removal and bariatric surgery performed at the same time, or medications that dissolve gallstones and prevent the formation of new gallstones. Sometimes the surgeon will recommend no treatment.

You may wonder why the gallbladder isn't just routinely removed at the time of bariatric surgery, eliminating the need for possible future surgery. First, any surgery (even a simple cholecystectomy) poses some risks. Second, only 8% of gastric bypass patients¹ and a smaller percentage of adjustable gastric band patients will develop symptomatic gallstones requiring further treatment within the first 21 months following bariatric surgery. If all gallbladders were removed at the time of bariatric surgery, 92% or more of bariatric surgery patients would have them removed needlessly. And third, without a properly functioning gallbladder, there may be increased intolerance to certain foods.

If you and your surgeon determined that having your gallbladder removed was the best course of treatment, you may experience varying symptoms when consuming certain foods without a gallbladder. Without a gallbladder present, the liver continues to make bile. The bile is no longer released in response to consuming foods or beverages with fat, but is instead released in a slow continuous trickle into the intestine. Some people have trouble with high fat foods, whole grain breads and cereals, gas-producing vegetables (beans, broccoli, cabbage, cauliflower, and Brussels sprouts), alcohol, dairy products, caffeine, and spicy foods. Consuming these may result in bloating, gas and/or diarrhea. Tolerance to specific foods after a cholecystectomy varies from person to person and usually improves over time.

1: Surg Obes Relat Dis. 2007 Jul-Aug; 3(4); 456-60. Epub 2007 Apr 1