

Biliary Dyskinesia

What is biliary dyskinesia?

Gallbladder disease that occurs *without gallstones* is called biliary dyskinesia or acalculous gallbladder disease. It can be acute (arising suddenly, often as a one-time occurrence) or chronic (persistent, recurrent). Acute acalculous gallbladder disease usually occurs in patients who are very ill from other disorders. Chronic acalculous gallbladder disease may be caused by dysfunctional muscle or valve defects that impair the gallbladder's ability to contract and release bile.

The term biliary dyskinesia refers to abnormal gallbladder function characterized by right upper quadrant abdominal pain (sometimes radiating to the upper back or shoulder blades) after eating fatty or fried foods, heavy meals with nausea/vomiting or bloating, followed by loosening of stools. The excess build up of pressure in the bile ducts is thought to be responsible for these typical gallbladder symptoms. Like gallstone disease, biliary dyskinesia is much more common in women than men.

How does your physician diagnose biliary dyskinesia/acalculous gallbladder disease?

The history and physical examination of a patient with biliary dyskinesia is very similar to patients with gallstone disease. Chronic acalculous gallbladder disease is usually diagnosed when a patient complains of gallbladder symptoms but there is no evidence of stones using standard imaging techniques like ultrasound. The most common test to confirm clinically suspected functional gallbladder disease is a CCK-HIDA (cholecystokinin dimethyl iminodiacetic acid) scan. The patient's blood is drawn and mixed with a low level radioactive substance and reinjected back into the blood stream where it collects in the liver and bile ducts. The patient is then given a hormone cholecystokinin octapeptide (CCK), which induces gallbladder contractions. A nuclear medicine camera captures pictures of the gallbladder emptying and determines if the gallbladder is functioning correctly. If the gallbladder demonstrates impaired emptying and/or the patient experiences a reproduction of the gallbladder symptoms, the diagnosis of biliary dyskinesia is confirmed. CCK- HIDA scanning is felt to be an objective and reproducible measure of gallbladder dysfunction, and can help predict which patients will have the best chance for symptomatic relief after cholecystectomy (gallbladder removal).

What is the treatment for biliary dyskinesia?

Most patients (75% - 95%) diagnosed with biliary dyskinesia (chronic acalculous gallbladder disease) experience partial or complete relief of their symptoms after cholecystectomy (surgical removal of the gallbladder using laparoscopic or open techniques). The CCK-HIDA scan helps predict which patients will benefit from gallbladder removal. Cholecystectomy for biliary dyskinesia provides relief of symptoms that are similar to those associated with treatment of symptomatic gallstones.

