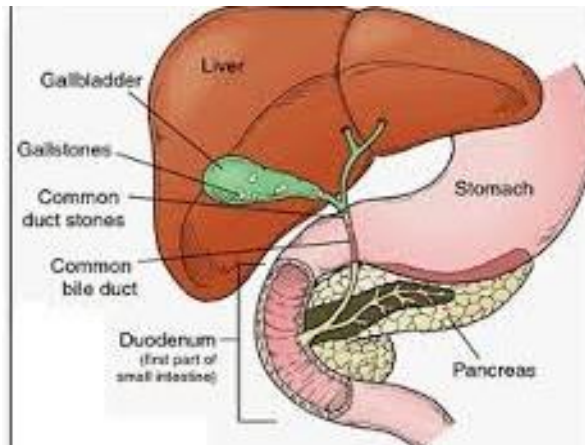


THE GALL BLADDER

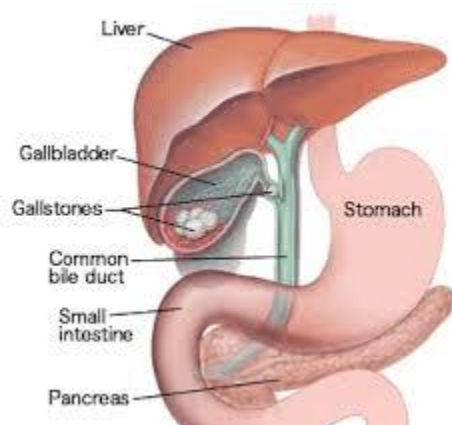


What Is The Gallbladder?

The gallbladder is a pear-shaped organ that rests beneath the right side of the liver. Its main purpose is to collect and concentrate a digestive liquid (bile) produced by the liver. Bile is released from the gallbladder after eating, aiding digestion. Bile travels through narrow tubular channels (bile ducts) into the small intestine. Removal of the gallbladder is not associated with any impairment of digestion.

What Causes Gallbladder Problems?

Gallbladder problems are usually caused by the presence of *gallstones*: small hard masses consisting primarily of cholesterol and bile salts that form in the gallbladder or in the bile duct.



It is uncertain why some people form gallstones. There is no known means to prevent gallstones. These stones may block the flow of bile out of the gallbladder, causing it to swell and result in sharp abdominal pain, vomiting, indigestion and, occasionally, fever. If the gallstone blocks the common bile duct, jaundice (a yellowing of the skin) can occur.

How Are These Problems Found and Treated?

Ultrasound is most commonly used to confirm the presence of gallstones. Gallstones do not go away on their own. Some can be temporarily managed with medication and diet changes but this treatment has a low, short-term success rate. Symptoms will eventually continue unless the gallbladder is removed because the diseased gallbladder will continue to form more stones.

Surgical removal of the gallbladder is the time honored and safest treatment of gallbladder disease. The gallbladder is removed *not* because it has stones but because it has formed stones at least once, *because it will form them again and again*.

Gallbladder removal is one of the most commonly performed surgical procedures using the key-hole technique known as Minimal access or laparoscopic surgery. The medical name for this procedure is *Laparoscopic Cholecystectomy or Lap chole in short form*.

What Are The Advantages of Performing Cholecystectomy Laparoscopically?

Rather than a long, five to seven inch incision required for open surgery for gall bladder removal, the *lap chole* operation requires only four small hole-like openings (ports) in the abdomen. This translates to remarkable advantages to the patient in that s (he) has;

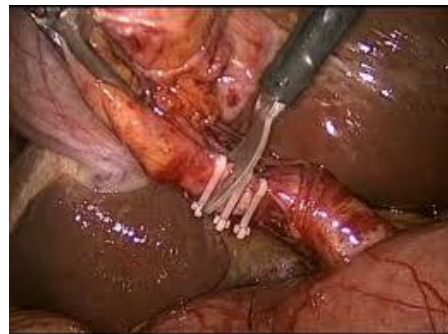
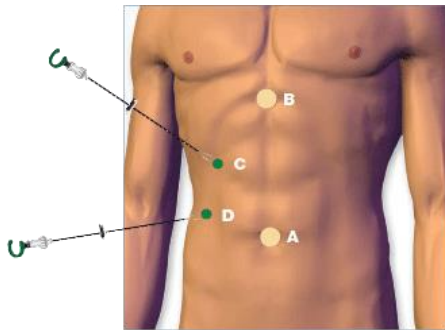
- minimal post-operative pain,
- experience faster recovery,
- has a shortened hospital stay- most patients go home within **1-2** days and
- enjoy a quicker return to normal activities than open gallbladder surgery patients.

Are You A Candidate For Laparoscopic Gallbladder Removal?

Although there are many advantages to laparoscopy, the procedure may not be appropriate for some patients. A thorough evaluation by a qualified laparoscopic surgeon will determine if laparoscopic gallbladder removal is the appropriate procedure for you.

How Is Laparoscopic Gallbladder Removal Performed?

It is done under general anesthesia, so the patient is completely asleep throughout the procedure, using a *cannula* (a narrow tube-like instrument), and the surgeon enters the abdomen in the area of the belly-button (umbilicus). A *telescope* (a tiny 1 cm diameter tube-like instrument) connected to a special camera is inserted through that *cannula*, giving the surgeon a magnified view of the patient's internal organs on a television screen. Other cannulas are inserted as shown below which allow your surgeon to delicately separate the gallbladder from its attachments and then remove it through one of the openings.



After the surgeon removes the gallbladder, the small incisions are closed with a stitch or two or with surgical tape.

What Happens If The Operation Cannot Be Performed Or Completed By The Laparoscopic Method?

In a small number of patients the laparoscopic method cannot be performed. Factors that may increase the possibility of choosing or converting to the “open” procedure may include **obesity, a history of prior abdominal surgery causing dense scar tissue, inability to visualize organs or bleeding problems during the operation.** The decision to perform the open procedure is a judgment decision made by the laparoscopic surgeon either before or during the actual operation. When the surgeon feels that it is safest to convert the laparoscopic procedure to an open one, *this is not a complication*, but rather sound surgical judgment. The decision to convert to an open procedure is strictly based on patient safety.

What Complications Can Occur?

While there are risks associated with any kind of operation, the vast majority of laparoscopic gallbladder patients' experiences few or no complications and quickly return to normal activities. Complications of laparoscopic cholecystectomy are however very infrequent. They include:

- Bleeding,
- Infection,
- Pneumonia
- Blood clots in the abdomen.
- Unintended injury to adjacent structures such as the bile ducts or bowel may occur
- Bile leakage into the abdomen from the tubular channels leading from the liver to the intestine rarely occurs.

Numerous medical studies show that the complication rate for laparoscopic gallbladder surgery is less than for open gallbladder surgery when performed by a properly trained surgeon.