Gallbladder Diseases and Common Bile Duct Stones

Cholecystectomy is recommended for patients with complications due to gallstones (duct obstruction and biliary pancreatitis) or related symptoms varying from minor right upper quadrant pains lasting from a few seconds to a few hours (biliary colic or chronic cholecystitis) to pain lasting longer than 12 hours that sends the patient to the emergency department (acute cholecystitis). The patient may also feel pain when the gallbladder is pressed. An abdominal ultrasound should be performed before cholecystectomy to confirm the presence of gallstones. Although the results of the ultrasound will be normal in 5% of patients with gallstones, this remains the single best test. The ultrasound may also show signs of acute or chronic cholecystitis (thickened gallbladder wall, fluid around the gallbladder) or common duct stones. Results of liver function tests should also be obtained to rule out other liver diseases and assess the risk of common duct stones.

Traditional open cholecystectomy is performed through a 5-inch incision under the right rib cage and requires a minimal 3-day hospital stay and 4-week absence from work. The laparoscopic operation is performed through four trocar sites (one in the umbilicus for the laparoscope and three under the right costal margin to perform the surgery) and can often be performed as an outpatient procedure.

Laparoscopic cholecystectomy begins with the identification of the cystic duct and artery and, if indicated, a cholangiogram. A laparoscopic common duct exploration and stone retrieval is performed for choledocholithiasis, saving the patient either open surgery for common duct stones or postoperative endoscopic retrograde cholangiopancreatography (ERCP). The gallbladder is then removed through the umbilical trocar site.

A recent unpublished review of our experience with outpatient laparoscopic cholecystectomies attempted between 1990 and 1997 demonstrated no major complications due to same day surgery. Of 2288 patients, 847 (37%) were scheduled as outpatients. Of those, 74% completed their course as outpatients, an additional 24% stayed only one night, and 3% were converted to open procedure. Two-thirds of patients preferred outpatient surgery and most returned to work in 1–2 weeks.