

Gallbladder Surgery and Laparoscopic Cholecystectomy

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Abstract

A cholecystectomy (koh-luh-sis-TEK-tuh-me) is a surgical procedure to remove your gallbladder - a pear-shaped organ that sits just below your liver on the upper right side of your abdomen. Your gallbladder collects and stores bile - a digestive fluid produced in your liver. A cholecystectomy is a common surgery, and it carries only a small risk of complications. In most cases, you can go home the same day of your cholecystectomy [1].

A cholecystectomy is most commonly performed by inserting a tiny video camera and special surgical tools through four small incisions to see inside your abdomen and remove the gallbladder. Doctors call this a laparoscopic cholecystectomy. In some cases, one large incision may be used to remove the gallbladder. This is called an open cholecystectomy [2].

A cholecystectomy can relieve the pain and discomfort of gallstones. Conservative treatments, such as dietary modifications, usually can't stop gallstones from recurring. In most cases, a cholecystectomy will prevent gallstones from coming back [3].

Most people won't experience digestive problems after a cholecystectomy. Your gallbladder isn't essential to healthy digestion. Some people may experience occasional loose stool after the procedure, which generally resolves over time. Discuss with your doctor any changes in your bowel habits or new symptoms following your procedure [4].

How quickly you can return to normal activities after a cholecystectomy depends on which procedure your surgeon uses and your overall health. People undergoing a laparoscopic cholecystectomy may be able to go back to work in a matter of days. Those undergoing an open cholecystectomy may need a week or more to recover enough to return to work.

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Types of Gallbladder Surgery

Doctors can remove your gallbladder in one of two ways:

Open surgery

During this procedure, your surgeon will make a 5- to 7-inch incision (cut) on your belly to take out your gallbladder. You'll need open surgery if you have a bleeding disorder. You may also need it if you have severe gallbladder disease, are very overweight, or are in your last trimester of pregnancy [5].

Laparoscopic cholecystectomy

Doctors also call this "keyhole surgery." Your surgeon doesn't make a big opening in your belly. Instead, they make four small cuts. They insert a very thin, flexible tube that contains a light and a tiny video camera into your belly. These help your surgeon see your gallbladder better. Next, they'll insert special tools to remove the diseased organ [6].

For both types of surgery, you'll be given general anesthesia. This means you'll sleep through the procedure and won't feel any pain while it's being done.

At the hospital or surgery center, you'll change into a hospital gown. An intravenous (IV) line will be inserted into a vein in your arm or hand for the purpose of anesthesia [7]. An open gallbladder procedure is typically performed under general anesthesia, so you'll be in a painless, deep sleep before the surgery starts.

Your abdomen will first be cleansed with an antiseptic solution to reduce infection risk. Your surgeon will then make an incision in your abdomen. There are two incision types your surgeon may choose. The surgeon might create a slanted incision just below the ribs on the right side of your abdomen. Or they could create an up-and-down incision on the right upper part of your abdomen. This is less common [8].

The skin, muscle, and other tissues are pulled back to expose your gallbladder. Your surgeon will then remove your gallbladder, close the wound with stitches, and then bandage the area.

According to the ACS, a laparoscopic gallbladder removal procedure takes about one to two hours. An open procedure can take longer, but the length of time depends on the severity of the gallbladder disease.

After your surgery, you'll be taken to the postoperative recovery area and then back to your hospital room. Your vital signs, pain levels, intake and output, and incision site will continue to be monitored until you're released home.

Symptoms

Symptoms of a ruptured gallbladder shouldn't be ignored. Seek immediate medical attention if you experience any gallbladder rupture symptoms. These symptoms may include:

1. Nausea and vomiting
2. Sharp pain in right upper quadrant of your abdomen
3. Jaundice, which is a yellowing of the skin and eyes
4. Fever

Results

A cholecystectomy carries of complications including:

1. Bile leak
2. Bleeding
3. Infection

Injury to nearby structures, such as the bile duct, liver and small intestine Risks of general anesthesia, such as blood clots and pneumonia. Your risk of complications depends on your overall health and the reason for your cholecystectomy.

Recovery

The length of time it takes you to heal depends on the type of surgery you have.

If you have your gallbladder removed during open surgery, you'll

need to stay in the hospital for a few days afterward. It may take between 6 to 8 weeks for your body to heal fully [9].

Laparoscopy is less involved, so you'll have less pain and heal faster than if you have open surgery. Most people who have it are able to go home from the hospital the same day. You'll likely be back to your normal routine within 2 weeks.

Open gallbladder removal is considered a safe operation. Complications are rare. However, every surgical procedure carries some risks. Before the procedure, your doctor will perform a complete physical examination and medical history to minimize these risks [10].

1. allergic reaction to anesthesia or other drugs
2. excessive bleeding
3. blood clots
4. damage to blood vessels
5. heart problems, such as rapid heart rate, heart attack, or heart failure
6. infection
7. injury to the bile ducts or small intestine
8. pancreatitis

Conclusions

Cholecystectomy, and in particular laparoscopic cholecystectomy, is still the standard treatment for symptomatic gallstone disease (biliary pain or cholecystitis). The main clinical indication for performing cholecystectomy is persistent or excruciating pain. The results of this assessment, although associated with some uncertainty, suggest that uncomplicated symptomatic gallstones may have a more benign natural course than previously assumed and it is likely that a proportion of patients may not require surgery in the long term and this seems to be safe in terms of subsequent events.

Cholecystectomy is more costly to the NHS because of the use of resources associated with surgery and the costs related to the treatment of post-surgery complications. Our modelling does show, however, that conservative treatment/observation fails to become a cost-effective option when a high proportion of people develop complications and require emergency surgery. A policy of surgery for all, as opposed to a policy of conservative management followed by surgery for people whose symptoms persist, is likely to be more costly but more effective, even though the difference between the two policies is modest. Owing to the current dearth of evidence for some of the relevant health states for gallstone disease and, consequently, the uncertainty around some utility values used in the model, the findings of our economic evaluation require a cautious interpretation.

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References

- 1 Nagral, Sanjay (2005) Anatomy relevant to cholecystectomy. *J Minim Access Surg* 1: 53-58.
- 2 Leeuw ThG, Verbeek PCM, Rauws EAJ, Gouma DJ (1995) A double or bilobar gallbladder as a cause of severe complications after (laparoscopic) cholecystectomy. *Surg Endosc* 9: 998-1000.
- 3 Dhulkotia A, Kumar S, Kabra V, Shukla HS (2002) Aberrant gallbladder situated beneath the left lobe of liver. *HPB* 4: 39-42.
- 4 Naganuma S, Ishida H, Konno K, Hamashima Y, Hoshino T, et al. (2014) Sonographic findings of anomalous position of the gallbladder. *Abdominal Imaging* 23: 67-72.
- 5 Meilstrup JW, Hopper KD, Thieme GA (1991) Imaging of gallbladder variants. *AJR Am J Roentgenol* 157: 1205-1208.
- 6 Cynthia KO (2005) Biliary Sludge Is Formed by Modification of Hepatic Bile by the Gallbladder Mucosa. *J Gastroenterol Hepa* 3: 672-678.
- 7 Meyer G, Guizzardi F, Rodighiero S, Manfredi R, Garavaglia M L, et al. (2005) Ion transport across the gallbladder epithelium: Current Drug Targets. *Endocr Metab Immune* 5: 143-151.
- 8 Yu Ning (2003) Metaphor, Body, and Culture: The Chinese Understanding of Gallbladder and Courage. *Metaphor and Symbol* 18: 13-31.
- 9 Hagey L R, Vidal N, Hofmann A F, Krasowski M D (2010) Complex Evolution of Bile Salts in Birds. *The Auk* 127: 820-831.
- 10 Higashiyama H, Sumitomo H, Ozawa A, Igarashi H, Tsunekawa N, et al. (2016) Anatomy of the Murine Hepatobiliary System: A Whole-Organ-Level Analysis Using a Transparency Method. *The Anatomical Record* 299: 161-172.