



**M.P. SHAH HOSPITAL**  
A Legacy of Care

# CHOLECYSTITIS

## WHAT IS CHOLECYSTITIS?

Cholecystitis is an inflammation of the gallbladder

- The gallbladder is a small sac-like organ located in the upper right side of the abdomen, just below the liver and is attached to the main duct. It carries bile from the liver into the intestine and acts as a temporary store for bile - which is a liquid that contains a fat-digesting substance produced in the liver.
- During a meal, the gallbladder contracts, and bile moves from the gallbladder through small, tube-like passages (called the cystic duct and the common bile duct) into the small intestine. Here, bile mixes with food to help break down fats.
- Cholecystitis usually develops when a person has gallstones, which are rock-like deposits that form inside the gallbladder. If a gallstone blocks the cystic duct (the outflow from the gallbladder), bile becomes trapped in the gallbladder. Chemicals in the trapped bile or a bacterial infection can then lead to inflammation of the gallbladder.

## TYPES OF CHOLESYCITITS

### ACUTE CHOLECYSTITIS

It is the sudden inflammation of the gallbladder that causes marked abdominal pain, often with nausea, vomiting, and fever.

### CHRONIC CHOLECYSTITIS

It is a lower intensity inflammation of the gallbladder that lasts a long time. It may be caused by repeat attacks of acute cholecystitis. Chronic cholecystitis may cause intermittent mild abdominal pain, or no symptoms at all. Damage to the walls of the gallbladder leads to a thickened, scarred gallbladder. Ultimately, the gallbladder can shrink and lose its ability to store and release bile.

The gallstones alone can cause episodes of crampy abdominal pain without any infection. Women are more likely than men to get gallstones. The risk of gallstones also is higher in anyone older than age 60.



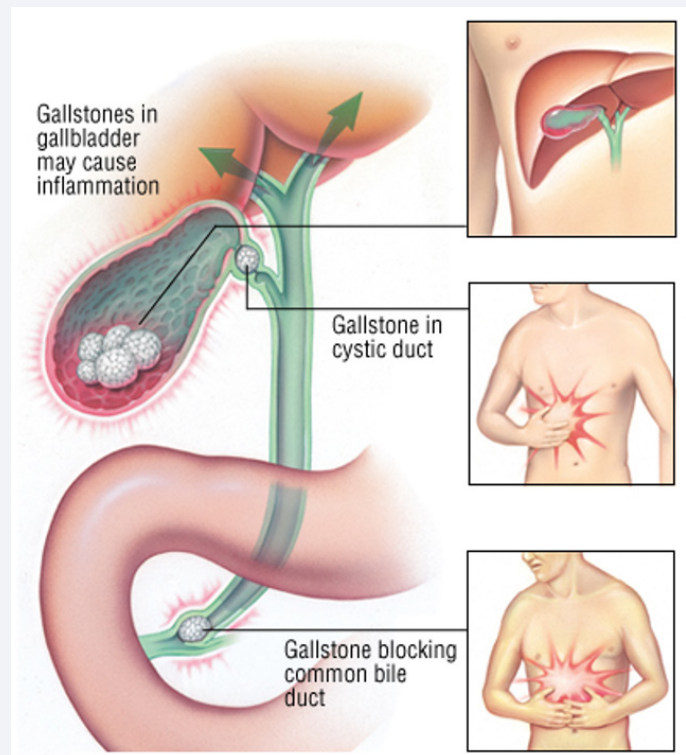
**M.P. SHAH HOSPITAL**  
A Legacy of Care

## RISK FACTORS

1. Women are more likely to get gallstones
2. Anyone older than age 60
3. Women who are pregnant or have had several pregnancies
4. Women who take estrogen replacement therapy or birth control pills
5. Obese people
6. People who have lost weight rapidly
7. People who eat a high-fat diet

## SYMPTOMS OF ACUTE CHOLECYSTITIS

1. Pain. You may feel this discomfort in the center of the upper abdomen or in the upper right portion of the abdomen, near the gallbladder and liver. In some people, the pain extends to the right shoulder. Symptoms typically start after eating.
2. Fever and possibly chills
3. Nausea and/or vomiting
4. Jaundice (yellowing of the skin or eyes), dark urine and pale, grayish bowel movements. These symptoms appear when gallstones pass out of the gallbladder and into the common bile duct, blocking the flow of bile out of the liver.
5. When gallstones in the common bile duct block the flow of bile from the liver to the intestine, the patient may develop a serious infection of the bile ducts called cholangitis. The typical symptoms of cholangitis are fever, right upper abdominal pain, and jaundice.
6. Acute pancreatitis (inflammation of the pancreas). Can occur because the duct from the pancreas also flows into the common bile duct, stones there can block the pancreas.





**M.P. SHAH HOSPITAL**  
A Legacy of Care

## CHRONIC CHOLECYSTITIS

Usually presents as intermittent pain. However, some people do not have any symptoms. If there is pain, it is usually mild and comes and goes. These rather nonspecific symptoms accompany many other illnesses so you may not be diagnosed with chronic cholecystitis until you have an episode of more severe symptoms during a sudden attack.

## EXPECTED DURATION

**Biliary colic** - the pain or discomfort may go away or become less severe after several hours if a trapped gallstone passes out of the cystic duct on its own. Your abdomen may continue to ache mildly for about 24 hours.

**Acute cholecystitis** - if infection and inflammation continue, your symptoms may get worse and you could develop complications, including a hole in the inflamed gallbladder wall (gallbladder perforation) and an infection that spreads to the lining of the abdomen (peritonitis). This is why people with cholecystitis usually are treated and observed in a hospital until their symptoms improve.

**Chronic cholecystitis** - may be present for years before a diagnosis is made. Surgery to remove the gallbladder will prevent symptoms from reoccurring.

## TESTS AND PROCEDURES

- **Complete Blood Count (CBC):** Increased levels of white blood cells indicate infection.
- **Bilirubin test:** Measures the amount of bilirubin in the blood to determine the underlying cause.
- **Ultrasound:** To determine cholecystitis by detecting duct blockage, fluid around the gallbladder, gall stones, and wall thickening.
- **CT scan:** CT scan of the abdomen is performed to look for any abnormalities.
- **Hepatobiliary Iminodiacetic Acid (HIDA) scan:** Radioactive dye is injected to track the production and flow of bile from the liver to small intestine.



**M.P. SHAH HOSPITAL**  
A Legacy of Care

## TREATMENT OF CHOLECYSTITIS

- **Acute cholecystitis** - Requires hospitalization for intravenous antibiotics given intravenously to treat infection, and medications to control symptoms of nausea and abdominal pain. Once your pain lessens or goes away, there are no signs of infection, and you are able to drink and eat, you will be discharged or have it surgically removed.

- 25% of people who have acute cholecystitis develop another episode within 1 year; 60% have another episode within 6 years. For this reason, most doctors recommend that people with cholecystitis have the gallbladder removed surgically (cholecystectomy).

- **Chronic cholecystitis** requires the removal of the gallbladder surgically.
- **Gallstones in the Common Bile Duct** should be removed to prevent blockage to the flow of bile, and possible cholangitis or pancreatitis. Usually this can be done using a special flexible telescope that is passed down the mouth, through the stomach, and to the opening where the bile duct empties into the intestine. This is called "endoscopic retrograde cholangiopancreatography" ("ERCP"). If ERCP is not possible then abdominal surgery is required to remove stones in the bile duct.

## PREVENTION

- **Lose weight slowly.** Rapid weight loss can increase the risk of gallstones. If you need to lose weight, aim to lose 1 or 2 pounds (0.5 to about 1 kilogram) a week.
- **Maintain a healthy weight.** Being overweight makes you more likely to develop gallstones. To achieve a healthy weight, reduce calories and increase your physical activity. Maintain a healthy weight by continuing to eat well and exercise.
- **Choose a healthy diet.** Diets high in fat and low in fiber may increase the risk of gallstones. To lower your risk, choose a diet high in fruits, vegetables and whole grains.

## TAKE AWAY POINTS

### When to Call a Professional

- Call your doctor if you have severe abdominal pain, fever and shaking chills, or jaundice.

### Prognosis

- Most people recover from episodes of acute cholecystitis within a few days to a few weeks. Rarely, a person can become critically ill from a complication, such as gallbladder perforation, cholangitis or pancreatitis and in rare cases the condition can be fatal.



**M.P. SHAH HOSPITAL**  
A Legacy of Care

## REFERENCES

- Burmeister G, Hinz S, Schafmayer C. [Acute Cholecystitis]. Zentralbl Chir. 2018 Aug;143(4):392-399. [PubMed: ...Introduction · Etiology · Pathophysiology · Evaluation
- Cholelithiasis - StatPearls - NCBI Bookshelf
- [www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov) > NBK470440
- Cholecystitis - an overview | ScienceDirect Topics
- [www.sciencedirect.com](http://www.sciencedirect.com) > topics >

---

**Version 1: 20 March 2021**  
**Review date 20/March 2024**

---

**MPSH/GEN/PEM/FRM-005**

---

**e: [clinics@mpshahhosp.org](mailto:clinics@mpshahhosp.org)**  
**t: 0204 429 1000 / 0733 606752 / 0722 204427**

