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The gallbladder is a sac-like organ that contains bile fluid. It drains through a small tube (cystic duct) into a larger tube (bile duct) and finally into the gut.

### WHAT IS ACUTE CHOLECYSTITIS?

Acute Cholecystitis is an inflammation of your gallbladder.

- Acute Acalcular Cholecystitis:
- o Inflammation of the gallbladder without evidence of gallstones or other blockage of the bile system.
- Acute Calcular Cholecystitis:
   Acute inflammation of the gallbladder with gallstones.

Acute cholecystitis may also lead to the following complications:

- Acute Cholangitis:
  - Acute inflammation of the common bile duct or biliary tree.
- Biliary Pancreatitis:
  - Acute inflammation of the pancreas due to obstruction of the pancreatic duct by gallstones.

#### ♠ CAUSES OF ACUTE CHOLECYSTITIS

Gallstones are the most common cause of acute cholecystitis:

• 90-95% of cases occur due to gallstones.

Other causes of cholecystitis include:

- Dehydration.
- Cardiovascular disease.
- Diabetes mellitus.
- Sepsis.
- Infections.
- Allergic reactions.

### • RISK FACTORS

Some people have a higher chance of developing cholecystitis. Risk factors include:

- Female gender.
- Age over 40 years.
- Obesity, including:
  - o Obesity treatments.
- Bariatric surgery.Women taking hormonal
- therapies:
- o Combined oral contraceptive pills.
- Hormone replacement therapy.
- Repeated pregnancy.
- Haemolytic anaemias.

# SIGNS AND SYMPTOMS OF CHOLECYSTITIS

Presence of these features suggests acute cholecystitis:

- Severe abdominal pain with a sudden onset.
- Pain in the right upper abdomen, which spreads to the right shoulder or back.
- Pain comes in waves and lasts from several minutes to hours often occurring at night.
- Nausea and vomiting.
- Fever.

Occasionally the stones may move from the gallbladder into the cystic duct, causing increased pressure in the gallbladder, inflammation, and pain.

The pain resolves if the stone falls back into the gallbladder or is pushed out into the bile duct. If the blockage is partial and of short duration, doctors call this pain biliary colic.

#### WHAT YOUR DOCTOR WILL DO

Your doctor will examine your abdomen and see if they can feel your gallbladder.

They will order blood tests and get an ultrasound scan of your abdomen.

### ASSESSING SEVERITY

Based on the results of the investigations, your doctor will assess the severity of the problem:

- Grade I (Mild) Cholecystitis: Mild inflammation of the gallbladder.
- Grade II (Moderate)
   Cholecystitis:
   Risk of accompanying serious local inflammation.
- Grade III (Life-Threatening)
   Cholecystitis:
   Organs or systems not functioning properly.



#### MEDICATIONS USED TO TREAT CHOLECYSTITIS

If you have Acute Cholecystitis, your doctor will give you painkillers (analgesics).

The most frequently used medicines are nonsteroidal anti-inflammatory drugs (NSAIDs), for example diclofenac. They have a dual function: help reduce inflammation and pain. Your doctor may also start antibiotics.

Depending on the severity of your symptoms, the doctor may also recommend intravenous fluids.

Speak to your doctor if you are allergic to any medication, including antibiotics.

IN SOME CASES, THE DOCTOR MAY REFER YOU TO A SPECIALIST CLINIC.

## SPECIALIST MANAGEMENT

In severe cases, an emergency drainage or a surgery may be required. There are several options available:

Laparoscopic Cholecystectomy is a surgical removal of the gallbladder through small cuts in the abdomen. Advantages of this method include:

- Reduced pain. Less pain medication required.
- Ease of recovery after surgery.
- A shorter hospital admission.
- Earlier return to full activity and work.
- Less visible abdominal scars.

Open Surgery is rarely used nowadays. It may be performed if you have:

- Suspected cancer.
- Complications of liver disease.
- Problems that affect the heart and lungs.
- Have had multiple abdominal surgeries in the past.

If your surgeons face trouble during laparoscopic cholecystectomy, they may need to finish the operation with an open operation.

Other methods of treatment:

Endoscopic Retrograde Cholangio-Pancreatography enables your surgeon to examine your pancreatic and bile ducts.

ANTIBIOTICS MUST BE PRESCRIBED BY A HEALTHCARE SPECIALIST.

TAKING ANTIBIOTICS ON YOUR OWN DECISION CAN BE DANGEROUS.

### RECOVERY AFTER SURGERY

Try getting out of bed and walk around, on the day of your surgery. This should reduce the risk of developing complications.

7-14 days are usually required to recover at home. You should be able to get back to your normal activities within 2-4 weeks.

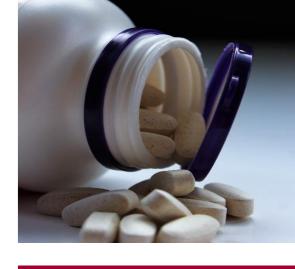
It may take weeks before your appetite returns to normal. Try eating small meals frequently. Any diarrhoea should improve after a few weeks.

Take your medications, including painkillers, as prescribed by the doctor.

#### Look out for following signs during the first two weeks after surgery:

- Severe pain.
- High fever.
- Abdominal swelling.
- If your skin, and the whites of your eyes, become yellowish in colour.
- If you develop an oozing wound.

If you are worried about any of these symptoms, see your doctor.



#### WHAT HAPPENS NEXT?

You do not need to change your diet after gallstones or gallbladder removal but always try to follow healthy eating principles.

Talk to your doctor if you think that eating or drinking triggers existing symptoms or causes new symptoms.

### ADDITIONAL INFORMATION

Additional information on diagnosis and management of Acute Cholecystitis can be found in the National Clinical Guideline published by The Ministry of Public Health (MOPH) Qatar.
The guideline is available for public on MOPH website:

www.moph.gov.qa

