Acute cholecystitis

Acute cholecystitis is inflammation of the gallbladder. It usually happens when a gallstone blocks the cystic duct. The cystic duct is the main opening of the gallbladder.

Gallstones are small stones that form in the gallbladder. They are usually made of cholesterol, a type of fat found in your blood.

Gallstones are very common. Around 1 in 10 adults have them.

Gallstones do not usually cause symptoms. But when a gallstone blocks the cystic duct, symptoms can appear. These include a sudden, intense pain around your tummy. This pain, called billary colic, usually lasts between 1 and 5 hours.

Some people with gallstones can also develop complications. Acute cholecystitis is a complication.

This can cause:

- persistent pain
- jaundice (yellowing of the skin and the whites of the eyes)
- a fever (high temperature of 38 degrees Celsius or above)

Acute cholecystitis is serious because of the risk of complications. It usually needs treatment in a hospital with rest, intravenous (through a drip into a vein) fluids and antibiotics.

Symptoms of cholecystitis

The main symptom of acute cholecystitis is sudden, sharp pain in the upper right of your abdomen (tummy). This pain spreads towards your right shoulder. The pain can last longer than 5 hours.

The affected part of the tummy is usually very tender, and taking deep breaths can make the pain worse.

Some people may have more symptoms, such as:

- a fever (high temperature of 38 degrees Celsius or above)
- feeling or being sick
- sweating
- loss of appetite
- jaundice (yellowing of the skin and the whites of the eyes)

- a bulge in the tummy

See your GP as soon as possible if:

- you develop sudden and severe pain in your tummy

If you cannot see your GP immediately, phone your local GP out-of-hours service.

Getting treatment for acute cholecystitis as soon as possible reduces the risk of serious complications.

Types of acute cholecystitis

There are 2 types of acute cholecystitis:

- calculous cholecystitis
- acalculous cholecystitis

Causes of calculous cholecystitis

Calculous cholecystitis is the less serious type but is the most common type of acute cholecystitis.

Calculous cholecystitis develops when a gallstone or biliary sludge blocks the cystic duct.

Biliary sludge is a mixture of bile, and small cholesterol and salt crystals. Bile is a liquid produced by the liver that helps digest fats.

The blockage in the cystic duct causes bile to build up in the gallbladder. The pressure inside the gallbladder increases and it becomes inflamed (swollen).

In around 1 in 5 cases, the inflamed gallbladder also becomes infected by bacteria.

Causes of acalculous cholecystitis

Acalculous cholecystitis is a less common type of acute cholecystitis. It is usually more serious than other types.

It usually develops as a complication of a serious illness, infection or injury.

Acalculous cholecystitis can happen after accidental damage to the gallbladder caused by:

- major surgery
- serious injuries or burns
- sepsis
- severe malnutrition
- HIV/AIDS

Diagnosing acute cholecystitis

Your GP will do a simple test by asking you to take a deep breath with their hand pressed on your tummy, below your rib cage.

Your gallbladder moves downwards as you breathe in. If you have cholecystitis, you'll feel sudden pain when your gallbladder is near your GP's hand.

If you have symptoms of acute cholecystitis, your GP will refer you to a hospital. You will need more tests and treatment.

Tests include:

- blood tests – to check for signs of inflammation in your body
- an ultrasound scan – to check for gallstones or other problems with your gallbladder

You may need other scans, such as an X-ray, CT scan or MRI scan. These can examine your gallbladder in more detail to help confirm your diagnosis.

Treating acute cholecystitis

If you have acute cholecystitis, you will need to go to hospital for treatment.

Initial treatment for acute cholecystitis

Initial treatment usually involves:

- fasting (not eating or drinking) to take the strain off your gallbladder
- receiving intravenous (through a drip into a vein) fluids to prevent dehydration
- taking medicine for your pain

You'll also be given antibiotics if you have an infection.

You need to continue treatments for about a week. You may need to stay in hospital.

After initial treatment, any gallstones usually fall back into the gallbladder. The inflammation will often improve.

Surgery to remove the gallbladder

After initial treatment, you may need your gallbladder removed. This prevents acute cholecystitis from coming back. It also reduces your risk of developing serious complications.

Some people without a gallbladder have bloating or diarrhoea after eating certain foods. But it's possible to lead a normal life without a gallbladder.

I's not essential to have a gallbladder. Your liver will still produce bile to digest food.

Gallbladder removal

Complications of acute cholecystitis

Without proper treatment, acute cholecystitis can sometimes lead to life-threatening complications.

The main complications of acute cholecystitis are gangrenous cholecystitis and perforated gallbladder.

Gangrenous cholecystitis is the death of gallbladder tissue. This can cause a serious infection that can spread throughout the body.

Perforated gallbladder is when the gallbladder splits open. This can spread the infection in your tummy. It can also cause an abscess (a build-up of pus).

In about 1 in 5 cases, people need emergency surgery to remove the gallbladder.

Preventing acute cholecystitis

It's not always possible to prevent acute cholecystitis. You can reduce your risk of developing it by reducing your risk of getting gallstones.

You may be able to help prevent gallstones by:

- changing your diet
- losing weight - if you're overweight

Preventing gallstones

The gallbladder

The gallbladder is a small, pouch-like organ. It's found underneath the liver. Its main purpose is to store and concentrate bile.

Bile is a liquid produced by the liver to help digest fats. It's passed from the liver into the gallbladder through a series of channels. These are known as bile ducts

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