

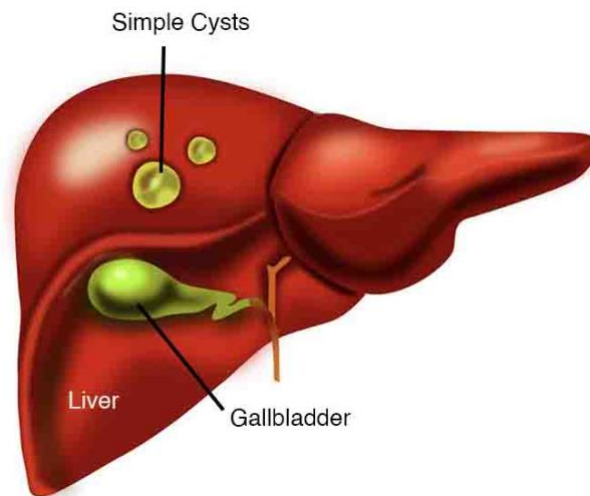


The Benign Nature of Liver Cysts: What You Should Know

The liver, one of the most crucial organs in the human body, occasionally develops small sacs of fluid known as liver cysts. They are also termed *hepatic cysts* (from Latin *hepaticus* "pertaining to the liver,") This article aims to provide a more in-depth understanding of liver cysts, shedding light on their nature, origins, symptoms, and potential treatments.

What exactly are liver cysts?

Benign liver cysts, sometimes called simple cysts, are the most common form of liver cysts. In simple terms, they are hollow balloon-like structures filled with fluid that form within the liver. (Cysts are different from a tumor or mass which is solid.) The size may vary. They can be as small as a matchhead or as large as 4 inches across. There can be just one or many.



Are Cysts Dangerous?

Liver cysts are relatively common, and the good news is that simple liver cysts are NOT dangerous. They are not a sign of liver disease and are not cancerous. They don't affect the function of the liver. Most individuals with liver cysts remain unaware of their existence, as these cysts often remain silent, causing no symptoms (asymptomatic). They are frequently discovered unintentionally during medical imaging procedures such as an abdominal ultrasound or CT scan performed for other reasons.

Cause is Unknown

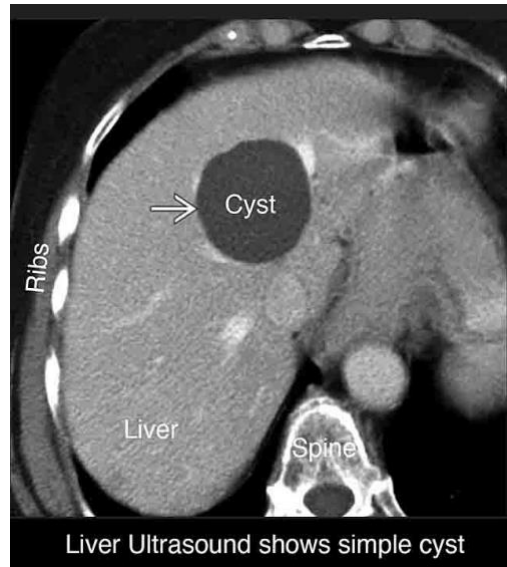
The origins of liver cysts remain a mystery. Some medical theories propose that these cysts might be congenital, implying that they are present from birth due to developmental anomalies. Others believe they might manifest later in life due to various factors.

Symptoms Associated with Liver Cysts

While most liver cysts remain asymptomatic, some can grow to a size where they start causing symptoms. When they do, individuals might experience sensations of abdominal bloating, localized pain in the upper right quadrant of the abdomen, and, in rare instances, internal bleeding from the cyst.

How Does Your Doctor Know?

If an individual presents with abdominal discomfort, your doctor might recommend blood work and imaging tests. These imaging tests, such as abdominal ultrasound, CT scans, or MRI scans, visualize the liver's internal structure, helping identify any cystic formations. They offer a non-invasive way to confirm or rule out the presence of cysts. Here is an abdominal ultrasound that demonstrates a simple liver cyst.



Complex Liver Cysts

While most liver cysts are simple, a small percentage are complex cysts with irregular margins or internal tissue. A small percentage of complex cysts are precancerous, and a small percentage of those will progress to liver cancer. Complex cysts require a more thorough evaluation and closer follow-up. Often, they are removed surgically.

Uncommon Types of Liver Cysts

Polycystic Liver Disease is often associated with Polycystic Kidney Disease. This hereditary condition causes numerous cysts in the liver and kidneys, often resulting in kidney failure and the need for kidney transplantation.

Hydatid (Echinoccal) cysts are caused by parasites that infect dogs and sheep and spread to humans through water systems cause hydatid disease. The liver and other parts of the body develop cysts filled with the parasites. If untreated, hydatid illness can result in elevated white blood cell counts, fever, and jaundice. Medication to eradicate the parasite and surgery to remove the cysts are the two treatments for these cysts.

Treatment for Liver Cysts

While small simple liver cysts may be left alone, large, painful or complex cysts require treatment. There is no helpful medication or diet. Surgical treatment options vary.

1. NO treatment is the most common treatment. Small, simple cysts require no treatment or frequent follow-up. Larger cysts are often followed at more frequent intervals by ultrasound or CT until determined to be stable.

2. Percutaneous Aspiration: This medical procedure might be warranted if a cyst grows significantly, leading to discomfort or other complications. This involves imaging guidance to insert a needle into the cyst to drain out the fluid content. Aspiration of small simple cysts is not recommended.
3. Cyst Fenestration: A more aggressive surgical approach where the cyst's wall is removed to reduce the risk of recurrence.
4. Hepatic Resection: Complex cysts may require a more extensive surgical procedure where portions of the liver affected by cysts are removed. Studies show liver cysts removed with surgery rarely come back. Amazingly, the liver is the only organ in the body that can “grow back” and regenerate more liver tissue to replace the removed portion.

Follow-Up

Being diagnosed with a liver cyst might initially be upsetting, but as you have read, most liver cysts are benign and won't significantly impact daily life. However, each case is different and requires individualized treatment or follow-up. If your doctor suggests a plan for treatment or periodic follow-up, it is essential to comply.

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Liver Cysts Quiz

What Did You Learn?

Quiz

Instructions: Answer each question in 2-3 complete sentences.

1. What is a simple liver cyst, and how does it differ from a tumor?
2. Are most liver cysts dangerous? Explain your answer.
3. How are liver cysts often discovered if they don't usually cause symptoms?
4. What are two medical theories about the origins of liver cysts?
5. What symptoms might someone experience if a liver cyst grows large?
6. What are some common imaging tests used to diagnose liver cysts?
7. What are complex liver cysts, and why are they of more concern than simple cysts?
8. What are two less common types of liver cysts, and how do they differ in cause and treatment?
9. What are the four treatment options mentioned for liver cysts?
10. What is unique about the liver that allows it to recover from a resection?
- 11.

Answer Key

1. A simple liver cyst is a hollow, fluid-filled sac within the liver, unlike a solid tumor or mass. They are considered benign and are not cancerous.
2. No, most liver cysts are not dangerous; they are benign, not a sign of liver disease, and don't affect liver function. They are often harmless and asymptomatic.
3. Liver cysts are frequently discovered unintentionally during medical imaging procedures such as an abdominal ultrasound or CT scan performed for other reasons. Because they are often asymptomatic, they aren't looked for intentionally.
4. Some medical theories suggest cysts are congenital, meaning they present from birth due to developmental anomalies. Others believe they manifest later in life due to various factors.
5. If a liver cyst grows large, it might cause abdominal bloating, localized pain in the upper right abdomen, and, in rare instances, internal bleeding. Symptoms result from the physical pressure of the cyst.
6. Common imaging tests include abdominal ultrasounds, CT scans, and MRI scans. These tests help visualize the liver's internal structure and identify cysts.
7. Complex liver cysts have irregular margins or internal tissue. These are of more concern because a small percentage can be precancerous and some may become liver cancer.
8. Polycystic liver disease is hereditary and associated with polycystic kidney disease and often results in kidney failure. Parasites from animals cause hydatid cysts and lead to elevated white blood cells, fever, and jaundice.
9. The treatment options include no treatment, percutaneous aspiration (draining fluid), cyst fenestration (removing the cyst wall), and hepatic resection (removing affected liver portions).
10. The liver is unique because it can regenerate, meaning it can grow back and create more liver tissue to replace what was removed. No other organ can do this.