CONDITION

Fitz hugh curtis syndrome

Fitz-Hugh-Curtis syndrome is inflammation around the liver caused by an infection spreading from the reproductive organs.

WHAT IT IS
Inflammation around the liver linked to pelvic inflammatory disease

BODY SYSTEM
Reproductive system and liver lining

MAIN SYMPTOMS
Right upper abdominal pain, pelvic pain, fever, nausea

WHAT CAUSES IT
Bacterial infection spreading from the reproductive organs

HOW IT IS DIAGNOSED
Laparoscopy showing liver-capsule inflammation or adhesions

MAIN TREATMENT
Antibiotics for pelvic inflammatory disease and pain relief

CAN IT BE CURED?
Sometimes - infection clears, adhesions may persist

IS IT AN EMERGENCY?
Sometimes - fainting or severe worsening pain

LONG-TERM OUTLOOK
Most recover, but pain or PID complications may persist

Overview

Fitz-Hugh-Curtis syndrome is inflammation of the thin tissue covering the liver and lining the nearby abdomen. This tissue is called the liver capsule. The liver itself is usually not infected or damaged.

The condition is a complication of pelvic inflammatory disease, often shortened to PID. PID is an infection and inflammation of the upper reproductive organs, including the uterus and fallopian tubes. Fitz-Hugh-Curtis syndrome most often affects people who have a uterus and fallopian tubes.

Bacteria can spread from the reproductive organs to the area around the liver. This causes pain, usually under the ribs on the right side. Over time, bands of scar tissue called adhesions may form between the liver capsule and the abdominal wall.

Fitz-Hugh-Curtis syndrome matters because its pain can resemble gallbladder disease, hepatitis, appendicitis or a blood clot in the lung. Pelvic symptoms may be mild or absent, so the connection with PID is not always obvious.

Prompt assessment and antibiotic treatment can clear the infection and reduce the chance of further PID-related harm.

Symptoms

The main symptom is pain in the right upper abdomen, beneath the ribs. It may start suddenly or build over time. The pain often becomes sharper when you take a deep breath, cough, sneeze, move or lie on your right side.

Pain may spread to the right shoulder or arm. This is called referred pain: the source is in the abdomen, but shared nerves make the discomfort feel as though it comes from somewhere else.

Because Fitz-Hugh-Curtis syndrome is linked to PID, you may also have:

Some people have strong upper abdominal pain with few pelvic symptoms. Others have symptoms of PID first. Symptoms alone cannot confirm the condition because several other problems can cause similar pain.

- Lower abdominal or pelvic pain
- Fever or chills
- Nausea or vomiting
- Unusual vaginal discharge
- Bleeding between periods or after sex
- Pain during sex
- Burning or pain when urinating

Causes and risk factors

Fitz-Hugh-Curtis syndrome develops when an infection associated with PID reaches the tissue around the liver. The infection may spread through the abdomen, lymph system or bloodstream.

The bacteria most often associated with PID include Chlamydia trachomatis , which causes chlamydia, and Neisseria gonorrhoeae , which causes gonorrhoea. Other bacteria normally

found in the vagina can also be involved. Having Fitz-Hugh-Curtis syndrome does not prove which bacterium caused it.

Chlamydia and gonorrhoea are sexually transmitted infections, or STIs. They can cause no noticeable genital symptoms. This means an infection may be present before a person knows about it.

Factors linked to a greater chance of PID, and therefore Fitz-Hugh-Curtis syndrome, include:

The condition is not caused by ordinary liver inflammation, alcohol use or gallstones. It is also not inherited.

- A current or recent untreated STI
- Sex without a condom or other barrier protection
- A new sexual partner or several partners
- A sexual partner with an STI
- A previous episode of PID

Diagnosis

There is no single routine blood test or scan that proves someone has Fitz-Hugh-Curtis syndrome. Diagnosis usually combines your symptoms, examination findings, infection testing and tests that rule out other causes.

A health professional may examine your abdomen and pelvis. Tell them about any vaginal discharge, unusual bleeding, pelvic pain or possible STI exposure, even if those symptoms seem unrelated to pain under your ribs.

Testing may include:

Scans can sometimes show inflammation around the liver, but a normal scan does not fully rule it out. Liver blood tests are often normal because the inflammation is around the liver rather than within it.

The most direct way to confirm the condition is laparoscopy. During this operation, a surgeon passes a small camera through a cut in the abdomen. They may see inflammation or thin, string-like adhesions between the liver and abdominal wall. These are sometimes described as "violin-string" adhesions.

Laparoscopy is not usually needed when the symptoms and other findings support the diagnosis and treatment is working. It may be considered when the diagnosis remains unclear, pain continues or another condition may require surgery.

- A urine sample or vaginal or cervical swab for chlamydia and gonorrhoea
- A pregnancy test
- Blood tests for infection, inflammation and liver function
- Ultrasound to look for gallstones, ovarian problems or a pelvic abscess
- CT scanning when the cause remains uncertain

Treatment and management

Treatment focuses on the underlying PID. Antibiotics like amoxicillin or doxycycline are usually started promptly because delaying treatment can increase the chance of reproductive complications. Treatment often covers several possible bacteria rather than waiting for every test result.

The exact antibiotics and where treatment happens depend on factors such as illness severity, pregnancy, allergies, test results and whether you can take medicine by mouth. Some people can be treated at home. Hospital care and intravenous antibiotics may be needed for severe illness, pregnancy, a suspected abscess, persistent vomiting or uncertainty about a surgical emergency.

Pain relief may be offered while the antibiotics take effect. Rest and avoiding movements that sharply worsen pain can help during the early stage, but they do not replace infection treatment.

It is important to complete the antibiotic course, even if the pain improves quickly. Symptoms should begin to improve within a few days. If they do not improve within about 72 hours, prompt reassessment is needed to review the diagnosis and treatment.

Recent sexual partners may need STI testing and treatment so that infection is not passed back and forth. Avoid sex until treatment is complete, symptoms have resolved and relevant partners have been treated. Follow-up STI testing may also be recommended.

Rarely, persistent pain caused by adhesions is treated with keyhole surgery to divide the scar tissue. Surgery is not a routine first treatment, and adhesions can sometimes form again.

Complications

Fitz-Hugh-Curtis syndrome usually does not cause lasting liver damage. Its main long-term concerns come from PID and from scar tissue.

Adhesions around the liver may remain after the infection has cleared. Many cause no symptoms, but some are associated with ongoing or recurring right upper abdominal pain.

PID can scar or block the fallopian tubes. Possible complications include:

These outcomes are possible, not inevitable. Treating the infection promptly lowers the chance of further damage, but antibiotics cannot always reverse scarring that has already developed.

- Difficulty becoming pregnant
- Ectopic pregnancy, when a pregnancy grows outside the uterus
- Long-term pelvic pain
- A tubo-ovarian abscess, which is a collection of infection near a fallopian tube or ovary
- Further episodes of PID

Prevention

Fitz-Hugh-Curtis syndrome cannot always be prevented. It may develop from an infection that caused few or no earlier symptoms.

Reducing the chance of STIs and treating them early can reduce the risk. Practical steps include using condoms or other barrier protection, having STI testing when recommended, and ensuring partners receive treatment when an infection is found.

Seek assessment for new pelvic pain, unusual discharge, bleeding between periods or pain during sex. Do not rely on symptoms alone to identify chlamydia or gonorrhoea because both can be silent.

If you have been prescribed treatment for PID or an STI, complete it as directed. Avoiding sex until treatment requirements have been met helps prevent reinfection.

Living with it and what to expect

Many people improve within days of starting appropriate antibiotics, although tenderness and pain may take longer to settle. Recovery time is influenced by the severity of inflammation, how early treatment began and whether an abscess or another complication is present.

Routine follow-up checks whether symptoms are improving and reviews test results. You may also be offered repeat STI testing because reinfection can occur. This follow-up is different from urgent care for severe or worsening symptoms.

The infection can clear completely, but antibiotics do not remove established adhesions. Some people continue to have occasional discomfort under the right ribs or chronic pelvic pain. Persistent symptoms should be reassessed rather than assumed to be permanent or caused by Fitz-Hugh-Curtis syndrome.

A previous episode does not provide immunity. The condition can happen again if another episode of PID develops.

Most people can return to their usual activities after the acute pain and infection settle. Fitz-Hugh-Curtis syndrome itself does not usually require a special long-term diet or liver monitoring. Future reproductive health depends more on the extent of PID-related scarring than on inflammation around the liver.

When to get medical help

Arrange prompt medical assessment for new pain under the right ribs, especially if it occurs with pelvic pain, fever, unusual vaginal discharge, bleeding or possible STI exposure. Similar symptoms can come from several conditions, so testing is important.

If you are being treated, seek prompt review if pain or fever is not improving within about 72 hours, symptoms return, or you cannot keep your antibiotics down.

Seek emergency care for:

These symptoms do not necessarily mean you have Fitz-Hugh-Curtis syndrome. They can signal an ectopic pregnancy, severe infection or another condition needing urgent assessment.

- Fainting, severe weakness or confusion
- Sudden, severe or rapidly worsening abdominal pain
- Heavy vaginal bleeding
- Trouble breathing, chest pain or coughing up blood
- Persistent vomiting or signs of dehydration
- Abdominal pain with a positive pregnancy test, especially with shoulder pain or dizziness

Common questions

Is Fitz-Hugh-Curtis syndrome an STI?

It is not itself an STI. It is inflammation around the liver caused by PID. PID is often linked to sexually transmitted bacteria such as chlamydia or gonorrhoea, although other bacteria may

also be involved.

Does Fitz-Hugh-Curtis syndrome damage the liver?

Usually not. The inflammation affects the liver capsule, which is the thin covering around the liver. Liver function is commonly normal. The main lasting concern is scar tissue around the liver or damage caused by PID elsewhere.

How long does the pain last?

Pain often starts to improve within a few days of effective antibiotic treatment, but it may take longer to resolve fully. Continuing or returning pain needs review because infection, adhesions or another condition may be responsible.

Can Fitz-Hugh-Curtis syndrome come back?

Yes. A new episode of PID can cause it again, particularly after another untreated STI or reinfection from an untreated partner. Previous infection does not create immunity.

Can I still get pregnant after having it?

Many people become pregnant normally afterward. However, the underlying PID can scar the fallopian tubes and make pregnancy more difficult. It can also increase the risk of ectopic pregnancy. Individual risk depends on the amount of reproductive-tract damage, not simply on having pain around the liver.

Can I have it without pelvic pain?

Yes. Some people mainly notice pain beneath the right ribs and have mild or no obvious pelvic symptoms. This is one reason the condition may be mistaken for a gallbladder, liver or lung problem.

Sources

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