CONDITION

Pelvic inflammatory disease

Pelvic inflammatory disease is an infection of the uterus, fallopian tubes, or nearby reproductive tissues.

WHAT IT IS
Infection and inflammation of the upper reproductive organs

BODY SYSTEM
Reproductive system

MAIN SYMPTOMS
Lower abdominal pain, unusual discharge, abnormal bleeding, painful sex

WHAT CAUSES IT
Usually an ascending bacterial infection

HOW IT IS DIAGNOSED
Clinical assessment; ultrasound or laparoscopy may provide confirmation

MAIN TREATMENT
Broad-spectrum antibiotics

CAN IT BE CURED?
Yes - antibiotics usually clear infection

IS IT AN EMERGENCY?
Sometimes - severe pain, fainting, or possible pregnancy

LONG-TERM OUTLOOK
Most recover, but delayed treatment raises fertility and pain risks

Overview

Pelvic inflammatory disease, usually called PID, is an infection and inflammation of the upper reproductive organs. It can affect the uterus, fallopian tubes, ovaries, and nearby tissues inside the pelvis.

PID mainly affects people who have a uterus and fallopian tubes. This includes women and some transgender and nonbinary people.

The infection usually begins in the vagina or cervix, which is the opening to the uterus. Bacteria then travel upward into the uterus and fallopian tubes. Sexually transmitted infections, especially chlamydia and gonorrhoea, are common causes. However, PID can also involve bacteria that normally live in the vagina.

PID matters because inflammation can cause scarring inside the fallopian tubes. This may lead to ongoing pelvic pain, difficulty becoming pregnant, or an ectopic pregnancy. An ectopic pregnancy develops outside the uterus and cannot continue normally.

Early treatment lowers the chance of complications. Treatment may begin before every test result is available because PID can be difficult to confirm and delaying antibiotics like amoxicillin or doxycycline can allow further damage.

Symptoms

Lower abdominal or pelvic pain is the most common symptom. It may affect both sides and can feel like a dull ache, pressure, or more severe pain.

Other symptoms can include:

Symptoms may begin over several days. Some people have only mild discomfort, while others become clearly unwell. PID can also cause no obvious symptoms. It may only be suspected later during tests for pelvic pain or fertility problems.

These symptoms are not specific to PID. Urinary infections, endometriosis, ovarian cysts, appendicitis, miscarriage, and ectopic pregnancy can cause similar problems. An assessment is needed to work out the likely cause.

- Vaginal discharge that is new, heavier, or smells different
- Bleeding between periods or after sex
- Heavier or more painful periods
- Deep pain during or after vaginal sex
- Pain or burning when passing urine
- Fever, chills, nausea, or vomiting
- Pain in the upper right side of the abdomen

Causes and risk factors

PID usually develops when bacteria move upward from the vagina and cervix. Chlamydia and gonorrhoea are important causes, but tests for these infections may be negative. Several types of bacteria may be involved at the same time.

Factors linked with a higher chance of PID include:

PID can sometimes occur after bacteria enter the uterus during childbirth, miscarriage,

abortion, or a procedure involving the cervix or uterus.

There is a small short-term increase in PID risk after an intrauterine device, or IUD, is inserted, mainly if an untreated infection is already present. The overall risk is low, and an IUD does not create an ongoing high risk of PID.

PID is not caused by poor personal hygiene, toilet seats, or sharing towels.

- A current or recent sexually transmitted infection
- Sex without a condom with a new partner
- Having more than one sexual partner
- A partner who has other sexual partners
- Previous PID or a previous sexually transmitted infection
- Vaginal douching, which may disturb normal vaginal bacteria

Diagnosis

There is no single routine test that can reliably prove or exclude PID. Diagnosis is usually based on symptoms, an examination, and tests that look for infection or other causes of pelvic pain.

During an examination, a clinician may gently press on the abdomen and perform an internal pelvic examination. Tenderness around the cervix, uterus, or ovaries can support the diagnosis.

Tests may include:

A pregnancy test is important because an ectopic pregnancy can resemble PID and needs different care. A negative chlamydia or gonorrhoea test does not rule out PID because other bacteria may be responsible or the infection may already have moved higher in the reproductive tract.

Ultrasound may show inflamed or fluid-filled fallopian tubes or an abscess. An abscess is a collection of infected fluid. A normal ultrasound does not exclude mild or early PID.

Laparoscopy can provide stronger evidence in uncertain cases. This is an operation in which a small camera is passed through a cut in the abdomen. It is not routinely needed because it is invasive and may still miss some inflammation inside the uterus.

- A pregnancy test
- Vaginal or cervical swabs for chlamydia, gonorrhoea, and other infections
- Urine tests

- Blood tests for signs of infection or inflammation
- An ultrasound scan of the pelvis

Treatment and management

PID is treated with antibiotics that cover several likely bacteria. Treatment often involves more than one antibiotic and may include an injection followed by tablets. The exact medicines depend on factors such as pregnancy, allergies, local guidance, and the severity of the infection.

Treatment commonly starts as soon as PID is suspected. Waiting for swab results can delay care, and negative results do not exclude the condition.

It is important to complete the full course, even if symptoms improve earlier. Antibiotics can clear the infection, but they cannot reverse scarring that has already formed.

Most people can be treated at home. Hospital treatment may be needed if you are pregnant, very unwell, unable to keep tablets down, have a suspected abscess, or need assessment for another possible surgical condition. It may also be needed if symptoms do not improve with initial treatment.

Symptoms should usually begin improving within about three days. If they do not, another assessment is needed. Tests or hospital treatment may then be considered.

Recent sexual partners may need testing and treatment for sexually transmitted infections, even if they have no symptoms. Avoid vaginal, anal, and oral sex until treatment is finished, symptoms have settled, and relevant partners have been treated. This helps prevent passing an infection back and forth.

If chlamydia or gonorrhoea is found, repeat testing is often advised after treatment because reinfection is common. Your follow-up plan should explain when to return.

An IUD does not usually need to be removed immediately. If symptoms do not improve, removal may be discussed alongside continued antibiotic treatment.

Complications

Many people recover without long-term problems, particularly when treatment starts early. Complications are more likely after severe, untreated, delayed, or repeated episodes.

Possible complications include:

An abscess can occasionally rupture and spread infection within the abdomen. This requires

urgent hospital care.

PID does not always cause infertility. Some people become pregnant without difficulty after treatment. However, the risk of fertility problems rises when the fallopian tubes are damaged, especially after repeated infections.

If you later become pregnant, tell your maternity care team about previous PID. Early assessment may be recommended to confirm that the pregnancy is developing inside the uterus.

- Scarring or blockage of the fallopian tubes
- Difficulty becoming pregnant
- Ectopic pregnancy
- Long-term or recurring pelvic pain
- A tubo-ovarian abscess around a fallopian tube or ovary
- Further episodes of PID

Prevention

PID cannot always be prevented. It can occur without a known sexually transmitted infection, and some people have no warning symptoms.

You can lower the risk of infection by:

Hormonal contraception and IUDs can prevent pregnancy but do not protect against sexually transmitted infections. Condoms provide the main protection against infections spread through sex.

If you have been treated for PID, finishing treatment and following advice about sex and partner treatment can reduce the chance of reinfection. Previous PID does not create immunity, so it is possible to develop it again.

- Using external or internal condoms during vaginal and anal sex
- Having recommended testing for sexually transmitted infections
- Testing before stopping condom use with a new partner
- Making sure partners receive treatment when an infection is found
- Avoiding vaginal douching

Living with it and what to expect

Pain and discharge often begin to improve within the first few days of effective treatment. Tiredness or mild pelvic discomfort may take longer to settle. Arrange follow-up if improvement is slow or symptoms return.

Most people do not need ongoing treatment after the infection has cleared. PID itself is not usually a lifelong condition. However, scarring from an earlier episode can remain after the bacteria are gone.

Some people develop recurring pelvic pain over the following months or years. This pain may need a separate assessment because not all pain after PID is caused by continuing infection. Repeated antibiotics are not helpful unless there is evidence of another infection.

Previous PID may affect fertility, but it does not mean that pregnancy will be impossible. If you have trouble becoming pregnant, fertility tests can check whether the fallopian tubes are open and look for other possible causes.

The emotional effects can also matter. An STI diagnosis may bring worry, embarrassment, or tension within a relationship. PID does not prove when an infection began or that a partner has recently been unfaithful. Some infections cause no symptoms and can remain unnoticed.

Routine follow-up focuses on whether symptoms are improving, whether treatment was completed, and whether STI testing or partner treatment is needed. Seek care sooner rather than waiting for a routine appointment if pain or illness is getting worse.

When to get medical help

Arrange prompt, same-day medical advice if you have new pelvic or lower abdominal pain together with unusual discharge, bleeding between periods, pain during sex, fever, or possible exposure to an STI. Early assessment is important, but these symptoms do not necessarily mean you have PID.

If you are being treated for PID, contact the service managing your care if symptoms are not clearly improving within about three days. You should also return if symptoms come back after treatment.

Seek urgent or emergency care for:

These symptoms can suggest an ectopic pregnancy, a ruptured abscess, severe infection, or another condition needing urgent treatment.

- Sudden or severe abdominal or pelvic pain

- Fainting, marked dizziness, confusion, or severe weakness
- Pelvic pain when you are or might be pregnant
- Shoulder-tip pain with abdominal pain or possible pregnancy
- Heavy vaginal bleeding
- Repeated vomiting or inability to keep medicine down
- High fever or rapidly worsening illness

Common questions

Can PID go away on its own?

Symptoms may become milder, but the infection may remain and cause scarring. Do not rely on it clearing without treatment. Prompt antibiotic treatment lowers the risk of further damage.

Is PID always caused by an STI?

No. Chlamydia and gonorrhoea are common causes, but bacteria normally found in the vagina can also be involved. Sometimes no specific organism is identified.

Can I have PID if my STI tests are negative?

Yes. Swabs test the lower reproductive tract and may miss infection higher in the uterus or fallopian tubes. Other bacteria may also cause PID. A negative STI test does not rule it out.

Can I get pregnant after PID?

Many people do. The chance of fertility problems is higher if the fallopian tubes have been scarred, particularly after delayed treatment or repeated episodes. Tests are available if you later have difficulty becoming pregnant.

Can PID come back after antibiotics?

Yes. Antibiotics treat the current infection but do not prevent a new one. Reinfection can occur if a partner remains untreated or you are exposed to another infection.

Does my partner need treatment?

Recent partners generally need STI testing and may be offered treatment, even without symptoms. Avoid sex until your treatment is complete, symptoms have resolved, and relevant partners have been treated.

Sources

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