

Information for you

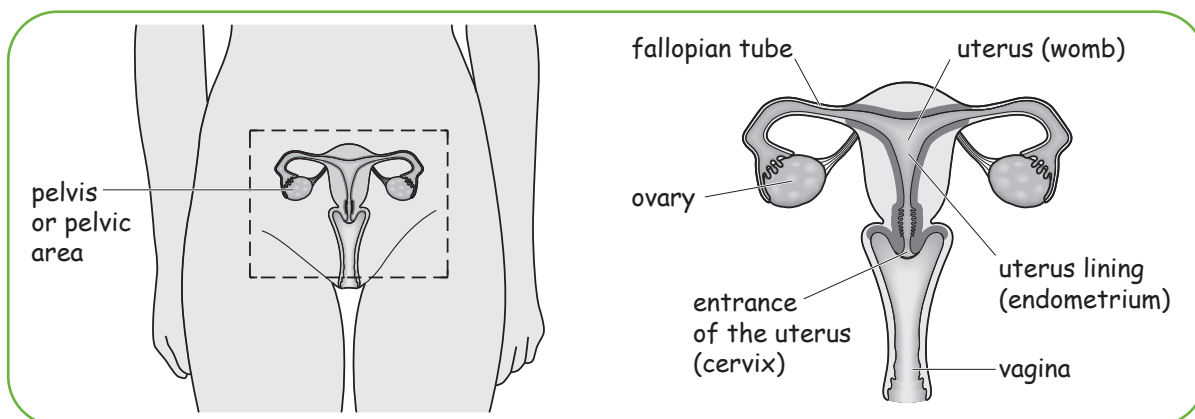
Published in August 2010 (next review date: 2014)

Acute pelvic inflammatory disease: tests and treatment

What is pelvic inflammatory disease?

Pelvic inflammatory disease (PID) is an inflammation in the pelvis. It is usually caused by an infection spreading from the vagina and cervix (entrance of the uterus) to the uterus (womb), fallopian tubes, ovaries and pelvic area. If severe, the infection may result in an abscess (collection of pus) forming inside the pelvis. This is most commonly a tubo-ovarian abscess (an abscess affecting the tubes and ovaries).

PID is common and accounts for one in 60 GP visits by women under the age of 45 years.



What is 'acute' pelvic inflammatory disease?

Acute PID is when there is sudden or severe inflammation of the uterus, fallopian tubes, ovaries and pelvic area due to infection.

Sometimes the inflammation can persist for a long time; this is known as chronic pelvic inflammatory disease (see **Are there any long-term effects?**).



What causes pelvic inflammatory disease?

Untreated sexually transmitted infections such as chlamydia and gonorrhoea are the most likely causes of PID. PID may also be caused by a number of less common infections that may or may not be sexually transmitted.

Occasionally PID can develop after a miscarriage or an abortion.

What are the symptoms of pelvic inflammatory disease?

Symptoms vary from person to person. You may have some or all of the following:

- smelly or unusual vaginal discharge
- a high temperature (more than 38°C)
- pain in the lower abdomen, which may be on one side and travel down your legs
- pain or bleeding during or after sex
- vaginal bleeding between periods.

Many of these symptoms are common and can be caused by other conditions. For instance, pain in the lower abdomen can be due to irritable bowel syndrome, a urine infection, a cyst on the ovary or appendicitis. Bleeding between periods can also be caused by hormonal contraception, such as the pill, an implant, an injection or a hormonal intrauterine device (coil).

Because of this, PID can be difficult to diagnose. If you have any of these symptoms, it is important to seek medical advice as soon as possible.

How do I get a diagnosis?

Consultation and examination

Your doctor will ask you about your symptoms, medical history and sexual history. If your doctor suspects you might have PID, he or she will examine you. You will be asked if you would like a chaperone (someone to accompany you) for this. The examination may cause some discomfort, especially if you do have PID.

Swab test

Your doctor will take samples from your vagina and your cervix with a swab (similar to a cotton bud). It usually takes a few days for the swab result to come back.

- A positive swab result confirms a diagnosis of PID and means you need treatment.
- A negative swab result does not mean you are definitely clear from PID. Swabs can give 'false negative' results, which means that the swab has not picked up exactly which infection is causing your PID.

Sometimes an additional swab may be taken from the urethra (the tube through which urine empties out of your bladder). This can increase the rate of detection of chlamydia and gonorrhoea or other infections.

Blood test

You may be offered a blood test. A result with a raised white blood cell count indicates the presence of infection. You may be asked to bring in or give a urine sample.

To exclude a diagnosis of PID, if there is any possibility you could be pregnant, you will be offered a pregnancy test. This is because other conditions such as ectopic pregnancy (when a pregnancy develops outside the uterus) can cause similar symptoms to PID.

Further tests

If your doctor suspects you have a severe infection, you will be referred to your local hospital for further tests and treatment. You may be offered an:

- Ultrasound scan. This is usually a transvaginal scan (where the probe is gently inserted into your vagina) to look more closely at the uterus, fallopian tubes and ovaries. Sometimes it is possible to detect inflamed fallopian tubes or, in very severe cases, the presence of an abscess using ultrasound.
- Operation under a general anaesthetic called a laparoscopy. The doctor uses a small telescope called a laparoscope to look at your pelvis by making a tiny cut, usually into your umbilicus (tummy button). This is also called keyhole surgery. This is especially useful when it is unclear whether you have PID or another condition such as appendicitis.

What are my treatment options?

If you have mild to moderate PID, you will be offered a course of antibiotics. Your doctor or nurse will ask you about any other medicines you are currently taking or you have taken recently. This is especially important if you are taking a contraceptive pill as antibiotics can interfere with its effectiveness.

Your doctor or nurse can give you information about the specific treatment you are given; this should include information about possible side effects.

You will usually be given a two-week course of antibiotic tablets. It is very important to complete your course of antibiotic tablets, even if you are feeling better. Most women who complete their course of antibiotics have no long-term health or fertility problems.

You may also be given medication for pain relief.

When does treatment start?

You should start taking antibiotic tablets as soon as they are prescribed. This is likely to be before you get your test results back – including the swab results. It is important you start taking the antibiotics at this point because any delay could increase the risk of long-term health problems (see **Are there any long-term effects?**).

Why might I need hospital treatment?

Your doctor may recommend treatment in hospital if:

- your diagnosis is unclear
- you are very unwell
- he or she suspects an abscess
- you are pregnant
- you are not getting better within a few days of starting antibiotics
- you are unable to take antibiotics by mouth.

When you are in hospital, antibiotics may be given intravenously (directly into the blood-stream through a drip). This treatment is usually continued until 24 hours after your symptoms have improved. After that, you will be given a course of antibiotic tablets. The exact type of antibiotics you are given will depend on your own circumstances.

Will I need an operation?

You will usually only need an operation if you have a severe infection or an abscess. An abscess may be drained during a laparoscopy or during an ultrasound procedure. The doctor will discuss these treatments with you in greater detail.

What if I'm pregnant?

It is rare to develop PID when you are pregnant.

If there is any chance you could be pregnant, and this has not yet been confirmed, you should tell your doctor or nurse. If a pregnancy is confirmed, certain antibiotics should be avoided. The risks associated with the majority of antibiotics prescribed for PID are low.

What if I have an intrauterine contraceptive device (IUD/coil)?

If your symptoms of PID are not improving within a few days of starting treatment, your doctor may recommend you have your IUD/coil removed. If you have had sex in the previous seven days, you will be at risk of pregnancy and emergency hormonal contraception (morning after pill) may be an option.

Should my partner be treated?

If you know that you have developed PID as a result of a sexually transmitted infection, it is important to contact anyone you have had sex with during the last six months. You should suggest that they have screening for chlamydia and gonorrhoea – even if they are well. Your doctor, local genitourinary medicine clinic or sexual health clinic can help you with this, or do it for you anonymously.

When can I have sex again?

You should avoid having sex until you and your partner have completed the course of treatment. If this is not possible, use a condom.

What about follow-up?

If you have a moderate to severe infection, you will usually be given an appointment to return to the clinic after three days. This is to check that the antibiotics are working. It is particularly important to attend this appointment so your doctor can see that your symptoms are responding to the antibiotics.

Women whose symptoms are not improving may be advised to attend hospital for further investigations and treatment.

If your doctor confirms your symptoms are improving, you will usually be given a further follow-up appointment at four to six weeks to check:

- your treatment has been effective
- if a repeat swab test is needed to confirm the infection has been successfully treated – this is particularly important if you have ongoing symptoms
- you have all the information you need about the long-term effects of PID
- if another pregnancy test is needed
- you have all the information you need about future contraceptive choices or your plans for pregnancy
- your sexual partner(s) have been screened and treated.

Are there any long-term effects?

Acute PID is an infection that is usually treated successfully. Long-term problems can arise if PID is untreated, if treatment is delayed or if there is a severe infection. The long-term effects can be:

- scarring of the fallopian tube, which can cause:
 - an increased risk of ectopic pregnancy
 - difficulties in becoming pregnant
- persistent pain in your lower abdomen (see RCOG patient information *Long-term pelvic pain: information for you*).

Repeated episodes of PID increase the risk of future fertility problems. You can reduce the risk of further infection by using condoms and by making sure that your sexual partner(s) are treated for sexually transmitted infections.

A glossary of all medical terms is available on the RCOG website at <http://www.rcog.org.uk/womens-health/patient-information/medical-terms-explained>.

Sources and acknowledgements

This information has been developed by the RCOG Patient Information Committee. It is based on the Royal College of Obstetricians and Gynaecologists (RCOG) guideline *Management of Acute Pelvic Inflammatory Disease* (originally published by the RCOG in 2003 and revised in November 2008). The guideline contains a full list of the sources of evidence we have used. You can find it online at: www.rcog.org.uk/womens-health/clinical-guidance/management-acute-pelvic-inflammatory-disease-32.

The RCOG produces guidelines as an educational aid to good clinical practice. They present recognised methods and techniques of clinical practice, based on published evidence, for consideration by obstetricians and gynaecologists and other relevant health professionals. This means that RCOG guidelines are unlike protocols or guidelines issued by employers, as they are not intended to be prescriptive directions defining a single course of management.

This information has been reviewed before publication by women attending clinics in Weston-Super-Mare, Birmingham, and South Yorkshire.

A glossary of all medical terms is available on the RCOG website at: www.rcog.org.uk/womens-health/patient-information/medical-terms-explained.

A final note

The Royal College of Obstetricians and Gynaecologists produces patient information for the public. The ultimate judgement regarding a particular clinical procedure or treatment plan must be made by the doctor or other attendant in the light of the clinical data presented and the diagnostic and treatment options available. Departure from the local prescriptive protocols or guidelines should be fully documented in the patient's case notes at the time the relevant decision is taken.

All RCOG guidelines are subject to review and both minor and major amendments on an ongoing basis. Please always visit www.rcog.org.uk for the most up-to-date version of this guideline.