Acute pelvic inflammatory disease

This information is for you if you want to know more about acute pelvic inflammatory disease (PID), how it is diagnosed and how it is treated. It may also be helpful if you are a relative or friend of someone who has this condition.

What is pelvic inflammatory disease?

PID is an inflammation of the pelvic organs. 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 an inflammation of the pelvic organs. It is usually caused by an infection spreading from the vagina and cervix to the uterus (womb), fallopian tubes, ovaries and pelvic area. If severe, it can cause abdominal pain and fertility problems in the future.

Sometimes the inflammation can persist for a long time and this is known as chronic PID (see the section ‘Are there any long-term effects?’).
What causes it?
Untreated sexually transmitted infections (STIs) such as chlamydia or gonorrhoea are the most likely causes of PID and account for one-quarter of the cases in the UK.

PID may also be caused by a number of less common infections that may, or may not, be sexually transmitted. Acute PID is more common in young, sexually active women.

Occasionally, PID can develop after a miscarriage or termination of pregnancy, after having a baby or after a procedure such as insertion of an intrauterine device (IUD) or coil.

What are the symptoms?
Sometimes you may not have any obvious symptoms. You may have one or more of the following, which can vary from mild to severe:

- smelly or unusual vaginal discharge
- pain in the lower abdomen that is usually on both sides and can feel like period pains
- pain deep inside during or after sex
- vaginal bleeding in between periods, bleeding after sex, or heavy periods
- nausea and vomiting
- fever
- low backache.

Many of these symptoms are common and can be caused by other conditions. This means that PID can be difficult to diagnose so, if you have any of these symptoms, it is important to seek medical advice as soon as possible.

How is it diagnosed?
Your doctor will ask you about your symptoms and your medical and sexual history. With your consent, your doctor may also do a vaginal (internal) examination. You should be offered a female chaperone for this. The examination may cause some discomfort, especially if you do have PID.

Swabs may be taken from your vagina and your cervix to test for infection. It usually takes a few days for the results to come back.

- a **positive** swab result confirms that you do have an infection
- a **negative** swab result, however, does not mean you are definitely clear of infection.

Sometimes an additional swab may be taken from the urethra (the tube through which urine empties out of your bladder). This can make it easier to detect chlamydia and gonorrhoea or other infections.

Further tests
You may be offered blood tests to check for infection. You may be asked for a urine sample. A test for HIV may also be advised.

If there is a chance that 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 womb) can cause similar symptoms to PID.
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 a probe is gently inserted into your vagina) to look more closely at the uterus (womb), fallopian tubes and ovaries. This may help to detect inflamed fallopian tubes or an abscess.
- an operation under a general anaesthetic called a laparoscopy, which is sometimes called keyhole surgery. The doctor uses a small telescope called a laparoscope to look at your pelvis by making tiny cuts, usually into your umbilicus (tummy button) and just above the bikini line. Laparoscopy can help diagnose PID and can be used to drain a pelvic abscess. (See the RCOG patient information Laparoscopy, which is available at: www.rcog.org.uk/en/patients/patient-leaflets/laparoscopy.)

**What is the treatment?**

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

You will usually be given an injection of an antibiotic followed by a 2 week course of antibiotic tablets. Treatment usually does not interfere with contraception or pregnancy. It is very important to complete your course of antibiotics even if you are feeling better. Most women who complete the course have no long-term health or fertility problems.

You may also be offered medication for pain relief. You should rest until your symptoms improve. If they get worse, or do not get better within 48 to 72 hours of treatment, you should see your doctor again.

**When does treatment start?**

You should start taking antibiotics as soon as they are prescribed, even if you have not had your test results back. This is because any delay could increase the risk of long-term health problems (see the section ‘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
- they suspect an abscess in your fallopian tube and/or ovary
- you are pregnant
- you are not getting better within a few days of starting oral antibiotics
- you are unable to take antibiotic tablets.

When you are in hospital, antibiotics may be given intravenously (directly into the bloodstream through a drip). This treatment is usually continued until 24 hours after your symptoms have improved. After that, you will also be given a course of antibiotic tablets.

**Will I need an operation?**

You will usually only need an operation if you have a severe infection or an abscess in the fallopian tube and/or ovary. 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, you should tell your doctor or nurse as certain antibiotics should be avoided in pregnancy. The risks that are associated with the type of antibiotics prescribed for PID are low for both mother and baby.

**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 and you have an IUD, your doctor may recommend that you have it removed. If you have had sex in the 7 days before it is removed, you will be at risk of pregnancy, and emergency hormonal contraception (the morning-after pill) may be offered.

**Should my partner be treated?**

If you have developed PID as a result of an STI, anyone you have had sex with in the last 6 months should be tested for infection, even if they are well. You can contact them yourself or, your doctor, local genitourinary medicine (GUM) clinic or sexual health clinic may help you with this.

**When can I have sex again?**

You should avoid having any sexual contact for 1 week after both you and your partner have completed the course of treatment, to avoid reinfection.

**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 3 days. It is important to attend this appointment so that your doctor can see that your symptoms are responding to the antibiotics.

If your symptoms are not improving, you may be advised to attend hospital for further investigations and treatment.

If your symptoms are improving, you will usually be given a further follow-up appointment 4 to 6 weeks later to check:

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

**Are there any long-term effects?**

Treatment with antibiotics is usually successful for acute PID. Long-term problems can arise if it 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
• an abscess in a fallopian tube and/or ovary

Repeated episodes of PID increase the risk of future fertility problems. Risks of further infection can be reduced by using condoms and by making sure that you and your sexual partner(s) have been treated.

**Key points**

• Pelvic inflammatory disease (PID) is an inflammation of the pelvic organs.
• Diagnosis is usually based on symptoms, examination and test results.
• Acute PID is usually treated successfully with antibiotics. Rarely, surgical treatment may be required.
• It is advisable to avoid having any sexual contact until you and your partner have completed the course of treatment and follow-up.

**Further information**


**Making a choice**

### Shared Decision Making

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.

### Ask 3 Questions

To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

*Ask 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options: A cross-over trial. Patient Education and Counselling, 2011;84: 379-85*
Sources and acknowledgements

This information has been developed by the RCOG Patient Information Committee. It is based on the British Association for Sexual Health and HIV (BASHH) 2011 publication UK National Guideline for the Management of Pelvic Inflammatory Disease, which is available at: www.bashh.org/documents/3572.pdf.

This leaflet was reviewed before publication by women attending clinics in Nottingham, Essex, Inverness, London, Liverpool, Manchester; Birmingham and Kingston upon Thames, by the RCOG Women’s Network and by the RCOG Women’s Voices Involvement Panel.

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A glossary of all medical terms is available on the RCOG website at: www.rcog.org.uk/en/patients/medical-terms.