Patient information: Gonorrhea (Beyond the Basics)

INTRODUCTION

Gonorrhea is a sexually transmitted infection that can affect both men and women. Approximately 700,000 people are infected with gonorrhea every year in the United States.

Symptoms of gonorrhea can include vaginal spotting or bleeding, abnormal discharge from the vagina or penis, and pain with urination. Gonorrhea has potentially serious consequences if it is not treated, but this infection can be cured with antibiotics.

More detailed information about gonorrhea is available by subscription. (See "Treatment of uncomplicated gonococcal infections" and "Diagnosis of gonococcal infections").

GONORRHEA CAUSES

Gonorrhea is caused by bacteria known as Neisseria gonorrhoeae. Gonorrhea is usually spread from one person to another during sex. A man does not have to ejaculate to spread the infection. You cannot become infected with gonorrhea by touching objects, like a toilet seat.

Your risk of getting gonorrhea is greater if you have a new sexual partner, more than one sexual partner, or if you have had gonorrhea before.

GONORRHEA SYMPTOMS

Symptoms of gonorrhea depend on where the infection is and whether you are male or female. However, some people have no symptoms at all. This means that gonorrhea can spread from person to person before it is diagnosed.

Both men and women can develop infection of the urethra (where urine exits), throat, and rectum. In women, infection can also occur in the cervix, uterus, fallopian tubes, and ovaries (figure 1). Infection in men can affect the prostate and the epididymis (figure 2).

Infection of the throat or mouth can cause a sore throat, but gonorrhea usually causes no symptoms at all.

Women — In women, symptoms of gonorrhea can include:
• Vaginal itching or abnormal vaginal discharge
• Vaginal bleeding or spotting
• Pain or burning during urination
• Anal itching or discharge
• Pain with bowel movements

Men — The most common symptoms of gonorrhea in men include:

• Pain with urination
• A milky discharge from the penis
• Pain and swelling in one testicle

Infection of the rectum can develop among men who have sex with men. Symptoms include a rectal discharge, constipation, and pain.

GONORRHEA DIAGNOSIS

Testing for gonorrhea is done in a doctor's or nurse's office with a sample of urine or with a swab of the cervix (in women) or urethra (in men). Results are usually available within 24 hours.

TESTING FOR OTHER SEXUALLY TRANSMITTED INFECTIONS

If you or your sexual partner is diagnosed with a sexually transmitted infection, like gonorrhea, you should have testing for other infections, including HIV, chlamydia, hepatitis B, trichomoniasis, and syphilis. (See "Patient information: Testing for HIV (Beyond the Basics)" and "Patient information: Chlamydia (Beyond the Basics)" and "Patient information: Hepatitis B (Beyond the Basics)".)

GONORRHEA COMPLICATIONS

If untreated, gonorrhea can lead to serious complications in both men and women, including:

• Joint infections and arthritis. (See "Patient information: Joint infection (Beyond the Basics)".)
• Women can develop pelvic inflammatory disease (PID) if gonorrhea spreads from the cervix to the uterus and fallopian tubes. PID can scar the fallopian tubes and lead to infertility and an increased risk of ectopic pregnancy (when a pregnancy develops in the fallopian tube).
• People with gonorrhea are at higher risk of becoming infected with HIV. (See "Patient information: Symptoms of HIV infection (Beyond the Basics)".)
• Men with untreated gonorrhea can develop epididymitis, which can lead to infertility. The epididymis collects sperm after it leaves the testis (figure 2).

GONORRHEA TREATMENT
Treatment of gonorrhea is the same for women and men. Most experts recommend a one-time antibiotic treatment, which includes a shot and a pill.

If you take the recommended treatment, you will not need to be retested for gonorrhea. However, if you continue to have symptoms, you should see your doctor or nurse again.

Sexual partner treatment — Treatment is important for you and anyone you have had sex with recently. Your doctor or nurse might ask you to tell your sexual partner(s) to be tested. In some cases, your doctor or nurse will give you a prescription for both you and your partner.

You should not have sex until both you and your partner have been treated. It is possible to be infected with gonorrhea more than once.

GONORRHEA PREVENTION

There are several things you can do to help prevent getting gonorrhea:

- Men should use a latex condom every time they have sex
- Do not have sex if you or your sexual partner has abnormal discharge, burning with urination, or a genital rash or sore
- Discuss testing for sexually transmitted infections with your doctor or nurse. If you are in a long-term relationship and neither of you has sex with anyone else, you have a lower risk of sexually transmitted infections.
- See your doctor or nurse if you have any symptoms of gonorrhea or another infection

WHERE TO GET MORE INFORMATION

Your healthcare provider is the best source of information for questions and concerns related to your medical problem.

This article will be updated as needed on our web site (www.uptodate.com/patients). Related topics for patients, as well as selected articles written for healthcare professionals, are also available. Some of the most relevant are listed below.

Patient level information — UpToDate offers two types of patient education materials.

The Basics — The Basics patient education pieces answer the four or five key questions a patient might have about a given condition. These articles are best for patients who want a general overview and who prefer short, easy-to-read materials.

Patient information: Avoiding infections in pregnancy (The Basics)
Patient information: Chlamydia and gonorrhea (The Basics)
Patient information: Ectopic pregnancy (The Basics)
Patient information: Genital warts (The Basics)
Patient information: Pelvic inflammatory disease (The Basics)
Patient information: Screening for sexually transmitted infections (The Basics)
Patient information: Syphilis (The Basics)
Patient information: Vaginal discharge in adults (The Basics)
Patient information: Epididymitis (The Basics)
Patient information: Anal pruritus (anal itching) (The Basics)
Patient information: Urethritis (The Basics)
Patient information: Newborn conjunctivitis (The Basics)
Patient information: Bartholin’s gland cyst (The Basics)

Beyond the Basics — Beyond the Basics patient education pieces are longer, more sophisticated, and more detailed. These articles are best for patients who want in-depth information and are comfortable with some medical jargon.

Patient information: Testing for HIV (Beyond the Basics)
Patient information: Chlamydia (Beyond the Basics)
Patient information: Hepatitis B (Beyond the Basics)
Patient information: Joint infection (Beyond the Basics)
Patient information: Symptoms of HIV infection (Beyond the Basics)

Professional level information — Professional level articles are designed to keep doctors and other health professionals up-to-date on the latest medical findings. These articles are thorough, long, and complex, and they contain multiple references to the research on which they are based. Professional level articles are best for people who are comfortable with a lot of medical terminology and who want to read the same materials their doctors are reading.

Acute cervicitis
Clinical features and diagnosis of pelvic inflammatory disease
Disseminated gonococcal infection
Epidemiology, pathogenesis, and clinical manifestations of Neisseria gonorrhoeae infection
Pathogenesis of and risk factors for pelvic inflammatory disease
Screening for sexually transmitted infections
Treatment of uncomplicated gonococcal infections
Diagnosis of gonococcal infections

The following organizations also provide reliable health information:

- National Institute of Allergy and Infectious Diseases
  (www.niaid.nih.gov/topics/gonorrhea/pages/default.aspx)
- Centers for Disease Control and Prevention
  (www.cdc.gov/std/Gonorrhea/STDFact-gonorrhea.htm)

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References