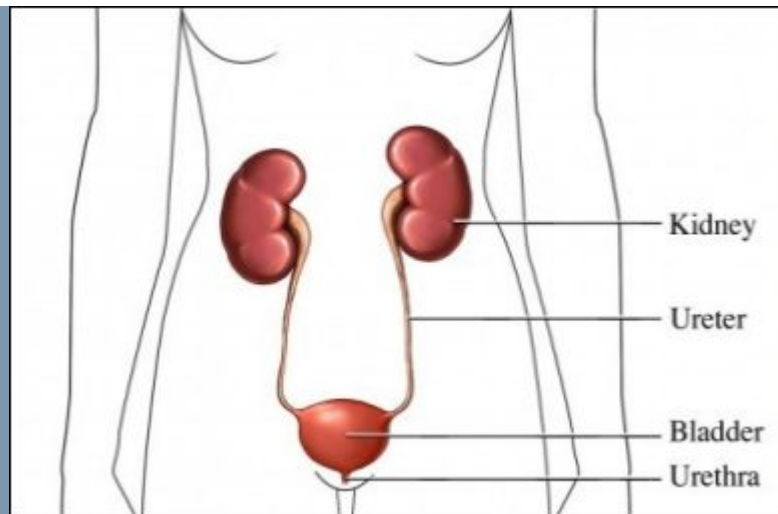


Urinary Tract Infections

Overview

What is a urinary tract infection?

A urinary tract infection (UTI) is an infection in the urinary tract. The urinary tract includes the kidneys, the bladder and the urethra. The kidneys are 2 bean-shaped organs that lie against the spine in the lower back. As blood flows through the kidneys, waste is removed and stored in the bladder as urine. The bladder is the balloon-like organ that stores the urine. The urethra is the tube that carries urine from the bladder and out of the body.



Female urinary tract

Symptoms

How do I know if I have a urinary tract infection?

Possible signs of a urinary tract infection include the following:

- A burning sensation or pain when you urinate
- Feeling like you need to urinate more often than usual
- Feeling the urge to urinate but not being able to
- Leaking a little urine
- Cloudy, dark, smelly or bloody urine

Sometimes germs can grow in the urinary tract but you won't have any of these symptoms. This is called asymptomatic (pronounced: "a-simp-toe-mat-ik") bacteriuria. Your doctor can test to find out if you have this. Asymptomatic bacteriuria should be treated in pregnant women, but does not need to be treated in most other women.

How do I know if my child has a UTI?

In a child, symptoms may include any of the symptoms listed above and may also include the following:

- Fever
- Diarrhea
- Vomiting
- Irritability or fussiness
- Less active
- Stomach pain
- Back pain
- Wets his or her clothes even though he or she is potty trained

Causes & Risk Factors

What causes urinary tract infections?

UTIs are caused by bacteria (germs) that get into the urinary tract. The urinary tract includes the kidneys, ureters, bladder and urethra. Any part of your urinary tract can become infected, but bladder and urethra infections are the most common.

Why do women get urinary tract infections more often than men?

Women tend to get urinary tract infections more often than men because bacteria can reach the bladder more easily in women. The urethra (the opening to your urinary tract) is shorter in women than in men, so bacteria have a shorter distance to travel.

The urethra is located near the rectum in women. Bacteria from the rectum can easily travel up the urethra and cause infections. Bacteria from the rectum is more likely to get into the urethra if you wipe from back to front (instead of front to back) after a bowel movement. Be sure to teach children how to wipe correctly.

Having sex may also cause urinary tract infections in women because bacteria can be pushed into the urethra. Using a diaphragm can lead to infections because diaphragms push against the urethra and make it harder to completely empty the bladder. The urine that stays in the bladder is more likely to grow bacteria and cause infections.

Frequent urinary tract infections may be caused by changes in the bacteria in the vagina. Antibacterial vaginal douches, spermicides and certain oral antibiotics may cause changes in vaginal bacteria. Avoid using these items, if possible. Menopause can also cause changes in vaginal bacteria that increase your risk for urinary tract infection. Taking estrogen usually corrects this problem, but may not be for everyone.

Diagnosis & Tests

What type of tests will I need to have?

Your doctor will usually be able to tell what's causing your pain by your description of your symptoms, along with a physical exam. Testing your urine (urinalysis) can also help your doctor identify what type of infection you have. Usually, a sample of your urine is taken in your doctor's office and sent to a lab to check for infection.

Treatment

How are urinary tract infections treated?

If you are a healthy adult man or a woman who is not pregnant, a few days of antibiotic pills will usually cure your urinary tract infection. If you are pregnant, your doctor will prescribe a medicine that is safe for you and the baby. Usually, symptoms of the infection go away 1 to 2 days after you start taking the medicine. It's important that you follow your doctor's instructions for taking the medicine, even if you start to feel better. Skipping pills could make the treatment less effective.

Your doctor may also suggest a medicine to numb your urinary tract and make you feel better while the antibiotic starts to work. The medicine makes your urine turn bright orange, so don't be alarmed by the color when you urinate.

How do I know if the treatment isn't working?

If the treatment isn't working, your symptoms will stay the same, get worse or you will develop new symptoms. Call your doctor if you have a fever (higher than 100.5 degrees), chills, lower stomach pain, nausea, and vomiting, or if, after taking medicine for 3 days, you still have a burning feeling when you urinate. If you are pregnant, you should also call your doctor if you have any contractions.

What if I have frequent UTIs?

If you have 3 or more urinary tract infections each year, your doctor may want you to begin a preventive antibiotic program. A small dose of an antibiotic taken every day helps to reduce the number of infections. If sexual intercourse seems to cause infections for you, your doctor may suggest taking the antibiotic after intercourse.

What if my child has UTIs again and again?

Your doctor may want to check to see if an anatomical (physical) problem is causing the UTIs. If so, surgery may be needed to fix the problem. Some children who have bladder or kidney problems have to take medicine all the time so they won't get another UTI. This medicine is taken once a day.

Complications

Can a UTI cause serious damage to the kidneys?

Yes, sometimes a UTI can damage the kidneys. It's important to seek treatment right away if you think you or your child has a UTI.

I'm pregnant. How will a UTI affect my baby?

If you have a UTI and it isn't treated, it may lead to a kidney infection. Kidney infections may cause early labor. Fortunately, asymptomatic bacteriuria and bladder infections can usually be found and treated before the kidneys become infected. If your doctor treats a urinary tract infection early and properly, it won't hurt your baby.

Prevention

Tips on preventing urinary tract infections

- Drink plenty of water to flush out bacteria. Drinking cranberry juice may also help prevent urinary tract infections. However, if you're taking warfarin, check with your doctor before using cranberry juice to prevent urinary tract infections. Your doctor may need to adjust your warfarin dose or you may need to have more frequent blood

tests.

- Don't hold your urine. Urinate when you feel like you need to. Some children don't go to the bathroom often enough. If your child does this, teach him or her to go to the bathroom several times each day.
- Wipe from front to back after bowel movements. Teach your child to wipe correctly.
- Urinate after having sex to help wash away bacteria.
- Use enough lubrication during sex. Try using a small amount of lubricant (such as K-Y Jelly) before sex if you're a little dry.
- If you get urinary tract infections often, you may want to avoid using a diaphragm as a birth control method. Ask your doctor about other birth control choices.
- Avoid taking or giving your child bubble baths.
- Wear loose-fitting clothing (including underpants), and dress your child in loose-fitting clothing.
- If you are uncircumcised, wash the foreskin regularly. If you have an uncircumcised boy, teach him how to wash his foreskin.

Questions to Ask Your Doctor

- Do I need any tests, such as urinalysis?
- What is the likely cause of my urinary tract infection (UTI)?
- Do I need medicine? How should I take it?
- What are the possible side effects of the medicine?
- When should I expect relief from my symptoms?
- What symptoms would indicate that my infection is getting worse? What should I do if I experience these symptoms?
- I get UTIs a lot. What can I do to prevent them?
- Do I need preventive antibiotics? If so, should I be concerned about antibiotic resistance?
- My child gets UTIs a lot. Could an anatomical problem be causing his or her UTIs?

Bibliography

[Evaluation and Treatment of Urinary Tract Infections in Children](http://www.aafp.org/afp/980401ap/ahmed2.html) by SM Ahmed, M.D., M.P.H., D.P.H., and SK Swedlund, M.D. (*American Family Physician* April 01, 1998, <http://www.aafp.org/afp/980401ap/ahmed2.html>)

[Urinary Tract Infections During Pregnancy](http://www.aafp.org/afp/20000201/713.html) by John E. Delzell, Jr., M.D., and Michael L. Lefevre, M.D., M.S.P.H. (*American Family Physician* February 01, 2000, <http://www.aafp.org/afp/20000201/713.html>)

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