

Urinary Tract Infections

Water is the most vital substance your body requires. Water is very important for the basic chemical reactions that keep the body functioning. Many of the unusable by-products of these chemical reactions are then processed through the kidneys and eliminated from the body through the urinary tract as **urine**.

The normal function of the urinary system can be disrupted by structural abnormalities or disease. For example, infection can cause inflammation that

can interrupt the normal operation of the urinary system. If you suspect you have a urinary tract infection or a problem with your urinary system, consult with your doctor, so that you can be tested and given proper treatment. Left untreated, an infection has the potential to cause more serious, even life-threatening, difficulties and permanent damage to your urinary tract.

An article in the March 22/29, 2000, issue of *JAMA* looks at the effectiveness of 2 different medications to treat a

specific type of urinary tract infection, **pyelonephritis**, which is inflammation of the upper urinary tract and kidney. The article stresses the importance of testing and of receiving the correct medication.

TYPES OF URINARY TRACT INFECTIONS:

The most common types of urinary tract infections are:

- **Urethritis** – Inflammation of the **urethra** (the tube-like structure that allows urine to pass from the bladder to be eliminated outside the body)
- **Cystitis** – Inflammation of the **bladder** (the balloon-like structure that stores urine before elimination through the urethra)
- **Pyelonephritis** – A more serious condition that is characterized by inflammation of the upper urinary tract, which includes the kidneys and the **ureters** (the 2 tube-like structures that connect each kidney to the bladder)

If you are prescribed an antibiotic for an infection, it is important that you finish all of the pills even if the symptoms have gone away and you are feeling better.

COMMON SYMPTOMS:

- More frequent urge to urinate, even though only a small amount is eliminated
- Pain or burning sensation during urination
- Greenish-yellow or white discharge from, or itching in, your penis or vagina

If you have any of these symptoms see your doctor; you may have a urinary tract infection or a sexually transmitted disease. If you are diagnosed with a sexually transmitted disease you need to let your sex partner(s) know so that they can also be treated.

- Pain in the back that is just above the waist
- Pain in your side or groin area
- Fever, chills, nausea, and vomiting
- Pus or blood in the urine

If you have any of the above symptoms see your doctor immediately; you may have pyelonephritis or another serious problem.

PREVENTING URINARY TRACT INFECTIONS:

- Drink plenty of fluids — at least 8 to 10 cups (64 to 80 ounces) of water a day. You need to increase your fluid intake beyond this if you are physically active or when you are in a warm environment.
- Urinate frequently
- Wash your genitals daily, especially before and after sexual relations
- Urinate after sexual relations
- Practice safer sex (e.g., wearing a condom during sexual relations)
- Women should always wipe from front to back after having a bowel movement
- Women should not use feminine hygiene products that contain deodorants

URINARY TRACT INFECTIONS IN CHILDREN:

Urinary tract infections can cause life-threatening and permanent damage to a child's urinary system. Therefore, it is important to receive treatment as soon as possible. Though the signs are similar for children and adults, they may not be as easy to observe in children. The child may have a fever and chills, experience nausea and vomiting, complain of pain in the abdomen, back, or pelvis, and complain about pain during urination. The child may also be irritable or not want to eat. For children with repeated urinary tract infections the child's doctor may suggest tests to determine if there are any abnormalities in the child's urinary system.

FOR MORE INFORMATION:

- National Kidney and Urologic Diseases Information Clearinghouse
3 Information Way
Bethesda, MD 20892-3580
301/654-4415
or www.niddk.nih.gov
- American Foundation for Urologic Disease
Answers to Your Questions About Urinary Tract Infections
(800) 242-2383
or www.afud.org

INFORM YOURSELF:

To find this and previous *JAMA* Patient Pages, check out the AMA's Web site at www.ama-assn.org/consumer.htm.

Additional Sources: National Institute of Diabetes and Digestive and Kidney Diseases, American Foundation for Urologic Disease, *The AMA Complete Guide to Women's Health*, American Dietetic Association

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