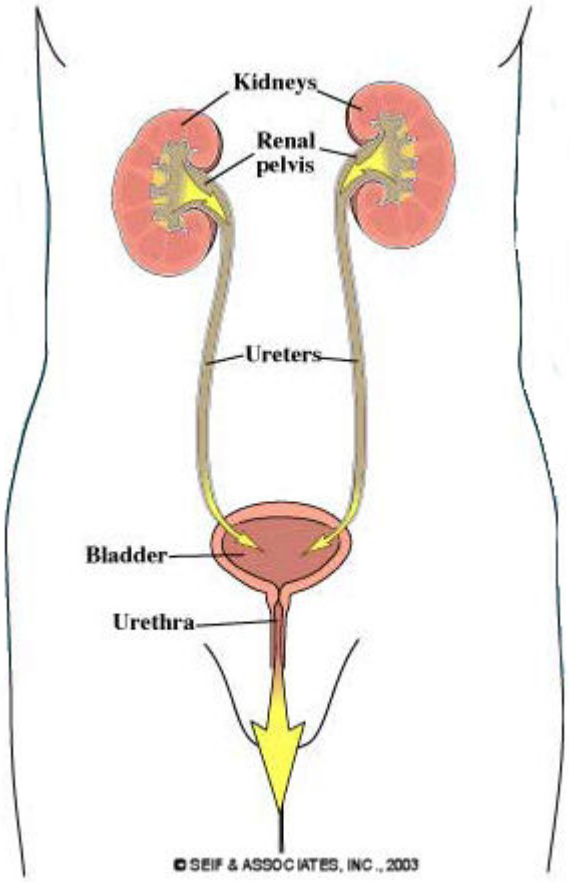
Overactive Bladder

The bladder has two functions that are totally opposite of the other. One is to relax and stretch out so it can store urine (fills like a balloon), and the other is to contract and squeeze down so that it can empty the urine that it has stored. Proper functioning of the bladder is a complex mixing of these two functions. The filling and emptying of the bladder can be influenced by:

- The bladder.
- The spinal cord.
- The brain.
- The nerves going to the bladder.
- Other organs that are closely related to the bladder such as prostate in males and the vagina in females.



As your bladder fills with urine, nerve signals are sent from the bladder to the brain to tell you that you may need to urinate. Normal urination requires that the bladder squeeze down with sufficient strength to empty the bladder, but this also requires that the bladder squeeze down sufficiently long to finish the job. In addition the sphincter muscles, which normally keep you from leaking urine, must also relax so that the urine can pass. Coordination between the bladder muscle squeezing down and the sphincter muscles relaxing is required to make everything happen normally.

With an overactive bladder sometimes the muscles of the bladder contract unexpectedly and involuntarily and this causes an urgent need to urinate. The normal response is to try to hold urine in by contracting the sphincter muscles. Sometimes the bladder contracts so strongly that the sphincter muscles cannot stop the urine from passing out and incontinence occurs. This kind of incontinence is called urge incontinence.

Having an overactive bladder can be embarrassing and awkward. It can keep you from living life the way you want to. Many people think it is just something you have to put up with as you grow older or have certain health conditions. In fact, there are treatments that can help make your life easier and more pleasant.

CAUSES

Many things can cause an overactive bladder. Possibilities include:

- Urinary tract infection or infection of nearby tissues such as the prostate.
- Prostate enlargement.
- In women, multiple pregnancies or surgery on the uterus or urethra.
- Bladder stones, inflammation or tumors.
- Caffeine.
- Alcohol.
- Medications. For example, diuretics (drugs that help the body get rid of extra fluid) increase urine production. Some other medicines must be taken with lots of fluids.
- Muscle or nerve weakness. This might be the result of a spinal cord injury, a stroke, multiple sclerosis or Parkinson’s disease.
- Diabetes can cause a high urine volume which fills the bladder so quickly that the normal urge to urinate is triggered very strongly.

SYMPTOMS

- Loss of bladder control. You feel the need to urinate and cannot make your body wait.
- Sudden, strong urges to urinate.
- Urinating 8 or more times a day.
- Waking up to urinate two or more times a night.

DIAGNOSIS

To decide if you have overactive bladder, your healthcare provider will probably:

- Ask about symptoms you have noticed.
- Ask about your overall health. This will include questions about any medications you are taking.
- Do a physical examination. This will help determine if there are obvious blockages or other problems.
- Order some tests. These might include:
  - A blood test to check for diabetes or other health issues that could be contributing to the problem.
  - Urine testing. This could measure the flow of urine and the pressure on the bladder.
  - A test of your neurological system (the brain, spinal cord and nerves). This is the system that senses the need to urinate. Some of these tests are called flow tests, bladder pressure tests and electrical measurements of the sphincter muscle.
  - A bladder test to check whether it is emptying completely when you urinate.
  - Cytoscopy. This test uses a thin tube with a tiny camera on it. It offers a look inside your urethra and bladder to see if there are problems.
  - Imaging tests. You might be given a contrast dye and then asked to urinate. X-rays are taken to see how your bladder is working.

TREATMENT

An overactive bladder can be treated in many ways. The treatment will depend on the cause. Whether you have a mild or severe case also makes a difference. Often, treatment can be given in your healthcare provider's office or clinic. Be sure to discuss the different options with your caregiver. They include:

- Behavioral treatments. These do not involve medication or surgery:
  - Bladder training. For this, you would follow a schedule to urinate at regular intervals. This helps you learn to control the urge to urinate. At first, you might be asked to wait a few minutes after feeling the urge. In time, you should be able to schedule bathroom visits an hour or more apart.
  - Kegel exercises. These exercises strengthen the pelvic floor muscles, which support the bladder. By toning these muscles, they can help control urination, even if the bladder muscles are overactive. A specialist will teach you how to do these exercises correctly. They will require daily practice.
  - Weight loss. If you are obese or overweight, losing weight might stop your bladder from being overactive. Talk to your healthcare provider about how many pounds you should lose. Also ask if there is a specific program or method that would work best for you.
  - Diet change. This might be suggested if constipation is making your overactive bladder worse. Your healthcare provider or a nutritionist can explain ways to change what you eat to ease constipation. Other people might need to take in less caffeine or alcohol. Sometimes drinking fewer fluids is needed, too.
  - Protection. This is not an actual treatment. But, you could wear special pads to take care of any leakage while you wait for other treatments to take effect. This will help you avoid embarrassment.
- Physical treatments.
  - Electrical stimulation. Electrodes will send gentle pulses to the nerves or muscles that help control the bladder. The goal is to strengthen them. Sometimes this is done with the electrodes outside of the body. Or, they might be placed inside the body (*implanted*). This treatment can take several months to have an effect.
- Medications. These are usually used along with other treatments. Several medicines are available. Some are injected into the muscles involved in urination. Others come in pill form. Medications sometimes prescribed include:
  - Anticholinergics. These drugs block the signals that the nerves deliver to the bladder. This keeps it from

releasing urine at the wrong time. Researchers think the drugs might help in other ways, too.
    - Imipramine. This is an antidepressant. But, it relaxes bladder muscles.
    - Botox. This is still experimental. Some people believe that injecting it into the bladder muscles will relax them so they work more normally. It has also been injected into the sphincter muscle when the sphincter muscle does not open properly. This is a temporary fix, however. Also, it might make matters worse, especially in older people.
- Surgery.
    - A device might be implanted to help manage your nerves. It works on the nerves that signal when you need to urinate.
    - Surgery is sometimes needed with electrical stimulation. If the electrodes are implanted, this is done through surgery.
    - Sometimes repairs need to be made through surgery. For example, the size of the bladder can be changed. This is usually done in severe cases only.

PROGNOSIS

Using a combination of treatments helps most people manage an overactive bladder.

POSSIBLE COMPLICATIONS

- Dry eyes or dry mouth. This can be caused by some medicines taken to treat overactive bladder.
- Constipation. Some medications can lead to this.
- Urinary retention in males who have a large prostate gland if anti-cholinergic medicines are used.

HOME CARE INSTRUCTIONS

- Take any medications your healthcare provider prescribed or suggested. Follow the directions carefully.
- Practice any lifestyle changes that are recommended. These might include:
    - Drinking less fluid or drinking at different times of the day. If you need to urinate often during the night, for example, you may need to stop drinking fluids early in the evening.
    - Cutting down on caffeine or alcohol. They can both make an overactive bladder worse. Caffeine is found in coffee, tea and sodas.
    - Doing Kegel exercises to strengthen muscles.
    - Losing weight, if that is recommended.
    - Eating a healthy and balanced diet. This will help you avoid constipation.
- Keep a journal or a log. You might be asked to record how much you drink and when, and also when you feel the need to urinate.
- Learn how to care for implants or other devices, such as pessaries.

SEEK MEDICAL CARE IF:

- Your overactive bladder gets worse.
- You feel increased pain or irritation when you urinate.
- You notice blood in your urine.
- You have questions about any medications or devices that your healthcare provider recommended.
- You notice blood, pus or swelling at the site of any test or treatment procedure.
- You develop a fever of more than 100.5°F (38.1°C).

SEEK IMMEDIATE MEDICAL CARE IF:

- You develop a fever of more than 102.0°F (38.9°C).

Document Released: 10/14/2010 Document Re-Released: 03/14/2011
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