

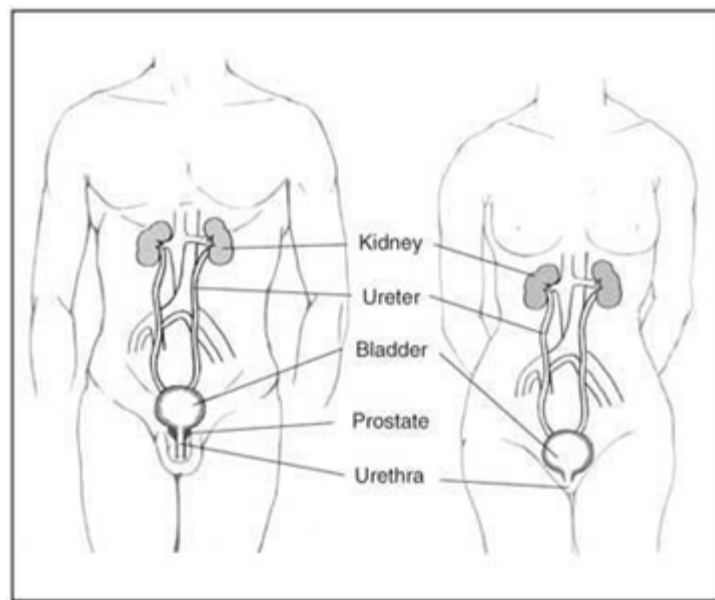
BMDA Urinary Management

The kidneys, ureters, bladder and urethra make up the urinary system. These organs work together to make and release urine.

From the kidneys, urine travels down two tubes called ureters to the bladder. See image. The bladder is a muscular organ that stores urine. Urine flows out of the bladder through the urethra. The process of releasing urine out of the body is called voiding.

Voiding

Illnesses, injuries or surgeries can cause problems with voiding. Damage to the brain, spinal cord, muscles, nerves or the bladder can cause changes with the natural process of voiding. Some of these changes may include urinary incontinence or urinary retention (see below).



The bladder and nearby organs
(Reprinted with permission from the National Institute of Diabetes and Digestive and Kidney Diseases, NIH)

- **Urinary incontinence** is when urine leaks often enough to be a problem. There are several types of incontinence. It may be caused by weak muscles, infection, brain disorders, surgery, physical activity or a number of other things. Your doctor or nurse can explain the exact cause of your urinary incontinence.
- **Urinary retention** occurs when the bladder is unable to naturally release urine. Some of the causes of urinary retention are brain or spinal cord injury or disease, surgery and prostate enlargement in males. Some prescription medicines can relax the bladder and cause retention.

Your doctor will explain more to you and will prescribe a urinary management program to meet your needs. Your doctor can tell you if the problem is temporary or permanent.

Methods of Urinary Management

- **Indwelling Foley catheter** is a catheter (small tube) that remains in the bladder to continuously drain urine.
- **Intermittent catheterization** is insertion of a catheter, at regular intervals, into the bladder to drain the bladder of urine.
- **Pelvic muscle exercises**, also called Kegel exercises, are exercises that strengthen pelvic muscles. These exercises can prevent or reduce urine leakage. For more information, ask for a copy of the patient education handout “Kegel Exercises.”

Bladder Complications

Urinary Tract Infection (UTI)

A urinary tract infection is an infection in the bladder or other parts of the urinary tract. A UTI can have multiple causes. These include an over full bladder and reflux of urine (a flow of urine back into the kidneys). A bladder infection can spread up the ureters to involve the kidneys.

Symptoms

- A burning feeling or pain when you pass urine
- Fever over 100.4 F
- Changes in the color of your urine (cloudy, dark amber, bloody)
- An unpleasant odor of your urine (fishy or sewage smelling)
- Need to urinate more often, but only a small amount of urine comes out
- Wetting or an increased number of bladder spasms

Management

- Drink more fluids if you notice an unpleasant odor, or changes in the color of your urine
- Contact your doctor immediately if you have a fever

Over Full Bladder

An over full bladder occurs when the bladder is stretched due to holding a much larger amount of urine than normal. The bladder is an elastic organ that stretches like a balloon when it is filled with urine. The normal amount is between 300 and 400 cc of urine. The bladder will become less flexible and lose its ability to work properly when it is stretched from holding a large amount of urine. The bladder will then become flabby, allowing more urine to stay in the bladder before the urge to void is felt. Urine that stays in the bladder too long is more likely to become infected.

Symptom

- Large amount of urine when voiding or doing intermittent self-catheterization Prevention

Prevention

- Empty bladder on a regular schedule and empty completely

Kidney or Bladder Stones

Kidney or bladder stones are tiny stones that form in the kidney or bladder. These can block the flow of urine. Kidney stones can interfere with the filtering of the blood and with draining urine out of the kidney. Multiple urinary tract infections, reflux, urine sitting in the bladder too long, and not drinking enough fluids can cause these stones to form.

Symptoms

- Blood in the urine
- Increased number of bladder spasms
- Stones passed in the urine
- Pain in the lower back or abdomen

Prevention

- Drink enough water to make the urine you pass clear or light yellow. If your urine becomes dark yellow, you are not drinking enough fluids.
- Empty the bladder on a regular schedule and completely.

Reflux

Reflux is the back flow of urine into the ureters and the kidneys.

Symptoms

- Multiple urinary tract infections with fever
- Recurring reflux of urine into the kidneys may lead to severe infections and kidney failure

References

The National Institute of Diabetes and Digestive and Kidney Diseases
www.digestive.niddk.nih.gov/ddiseases/pubs/pancreatitis

The National Kidney Foundation
<https://www.kidney.org/>