introduction: dysfunctional elimination syndrome (DES)

Daytime wetting urinary tract infections are common in many children and can be frustrating for parents. These problems usually occur in children who:

- Have been toilet trained
- Have been apparently dry for a period of time.

Daytime wetting or accidents occur when these children start the habit of holding urine when they should be urinating. This happens because the bladder is changing from a baby’s bladder to an adult’s bladder.

In adults, the brain lets the bladder know to relax when the bladder is too full and it needs to be emptied immediately (i.e. while riding in a car). Children who do not yet have this ability develop habits to keep the urine from coming out. Some examples of these habits are:

- Crossing their legs
- Squatting down on their heels
- Holding onto their genitals

Doing these things may help for a short time, but eventually the bladder becomes over-filled. The child can’t hold the urine in anymore, and this leads to urinary leaking or accidents. This is called dysfunctional voiding.

When the child eventually urinates, he or she relaxes only enough to empty part of the bladder. Emptying only a part of the bladder can lead to urinary infections and a hyperactive bladder. When dysfunctional voiding is accompanied by constipation (large, painful and irregular bowel movements), the condition is commonly referred to as dysfunctional elimination syndrome, or DES.
How to urinate?

It is very important that the child relaxes to allow the bladder to empty completely. Relaxing can be hard for a child to understand, so here are some tips:

1. Remove the underpants or tights completely off one leg to allow the knees to be as far apart as possible. The child can also sit backwards to face the toilet.
2. Tell your child to lean forward so his or her head is between the knees and can see the urinary stream.
3. Have your child breathe deeply and slowly, and relax all muscles of the head, arms, trunk, and legs to be “like a rag doll (like Raggedy Annie).”
4. Have your child watch urine flowing and “make” the urine flow in a continuous stream. Avoid intermittent flow or gushing flow. Keep the buttock muscles soft and quiet.
5. Reward your child for spending plenty of time urinating and for making a good amount of urine. Your may have a “hat” to place in the toilet bowl to catch the urine so the amount of urine can be recorded and your child can see that they did a good job.

Combine this technique with a reward and encouragement system. Avoid using food as a reward. Stars, stickers or pennies can be used. With the money they can buy stickers or toys at a later time.

Bladder Retraining

Children with daytime wetting and frequent infections usually have trouble relaxing and opening the sphincter muscle. The sphincter muscle tightens to keep urine in, and relaxes when urine is let out. Relaxing the external sphincter muscle is a learned behavior.

1. First, to teach a child to relax, ask the child to make a tight fist. Ask the child to notice that his or her hand is not relaxed and the fist is closed.
2. Then, ask the child to relax the hand, and notice that the hand opens automatically.
3. Tell your child that this is the way the sphincter muscle works to allow urine to come out of the bladder. Avoid pushing or straining to open the sphincter, because the sphincter will only open if relaxed.

With more efficient bladder emptying and frequent urination, your child will break the habit of trying to hold onto the urine when the bladder is full. With more complete bladder emptying, there will be less likelihood for germs to stay inside the bladder. This will decrease the frequency of the urinary tract infections. Recurrent infections are troublesome because they require frequent doctor visits, and are expensive and time consuming. Repeated infections are harmful, and antibiotic treatments are usually just quick fixes and do not solve the problem. The true underlying problem is inefficient, incomplete and untimely bladder emptying.

Importance of Timed Voiding

The child is reminded to urinate every two hours during the day, especially at school. This schedule allows the bladder to empty before it gets full. It also means your child urinates before bladder contractions create the feeling of fullness and urgency. This will help in a few ways:

1. Breaks the cycle of bladder fullness leading to the feeling of urgency
2. Breaks bad habits of holding onto urine
3. Decreases urinary accidents and, eventually, incomplete emptying of the bladder and urinary infections

Changing your child’s habits may take a long time. Some children (ages three to eight) need an adult to remind, encourage and lead them to the bathroom every two hours. Older children (ages eight to 12) still need an adult to monitor them. It is important that this program is carried out in school too, and that the child is allowed to go to the bathroom whenever he or she needs to.

The child is rewarded and encouraged for spending enough time on the toilet. It is certainly not as much fun as playing! The goal is to train the child to urinate frequently without reminders. If your child is constipated, a bowel program should be done with the bladder training in order to be successful in treating the child. In some cases, when the bladder is too hyperactive, bladder retraining can be helped with medications.

Questions?

Call the urology department at 937-641-3466