

Dysfunctional Voiding

Dysfunctional voiding includes a variety of urinary symptoms:

- Urinary urgency (Gotta go! Gotta go!)
- Urinary frequency (Gotta go all the time)
- Urinary tract infections
- Pain or straining with urination
- Urine dribbling
- Urinary incontinence (wetting accidents)
- Holding / lazy bladder
- Bladder spasms
- Hesitancy (Delay in starting stream)
- Blood in urine

Normal Bladder Function

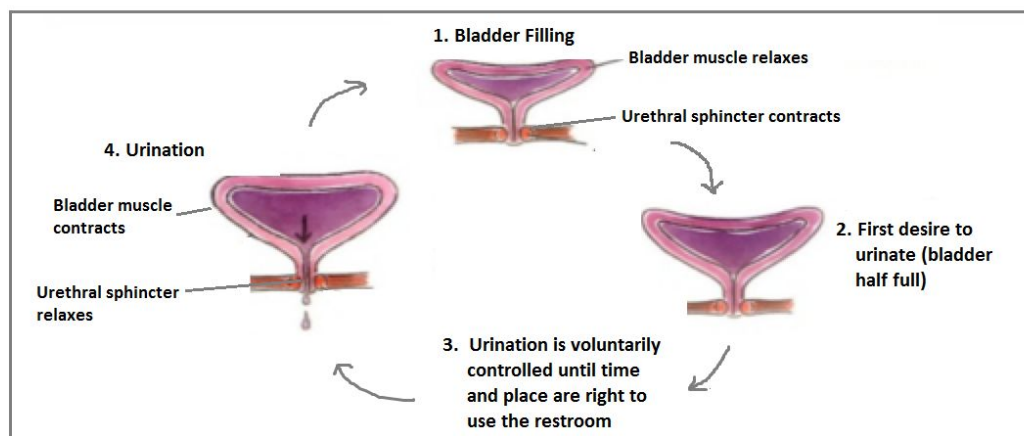
The normal bladder stores urine at a very low pressure. When the bladder becomes full, it sends a signal of “fullness” to the brain (start looking for a bathroom). After 5 min - 1 hour, the bladder sends a signal of “urgency” (gotta go!). Most people can put off voiding as long as they want without leaking urine.

The signals are not pressure spikes or spasms within the bladder. The signals are sent from bladder to brain without changes in bladder pressure.

When a child decides to pee, he/she purposely relaxes the urethral sphincter and then unconsciously the bladder contracts on its own--it is a reflex. We cannot directly control our bladder contraction, but we can control opening and closing our sphincter.

The coordination between our conscious sphincter control and our unconscious bladder contraction is very important for normal voiding and maintaining continence. Discoordination will lead to increases in bladder pressure or can stretch out the bladder so that the “fullness” and “urgency” messages to the brain get masked.

Normal Cycle of Bladder Filling and Emptying



What causes voiding dysfunction?

Sometimes, the disruption of the normal voiding cycle may be the result of a neurological problem. This could be the result of an abnormality of the spinal cord or brain that affects how nerves help control the function of the bladder and urinary sphincter.

However, it's more often a learned problem. For example, your child may continually hold his/her urine in all day because he/she doesn't want to stop playing to go to the bathroom. Also, constipation is a huge contributing factor in dysfunctional voiding by not allowing the bladder to fill and empty normally.

Children get into this routine for different reasons:

- Some may be routinely too busy to break for the bathroom (“busy little girl/boy syndrome”)
- Others may have experienced a urinary tract infection that caused pain and as a result are afraid of urinating.
- Sometimes the problem is related to early potty training.
- A child may have taken on abnormal urinating habits from the beginning.
- Constipation

A hard cycle to break

Whatever the reason, some children get into a pattern of not relaxing their external urethral sphincters. Their bladders can tolerate this for months and in some cases years, depending on how hard the child works to avoid urinating by not relaxing the sphincter.

Eventually the bladder muscle, which has to continually work against this voluntary blockage, will become so strong that it will overcome the blockage and periodically empty on its own and cause the child to leak, whether the child is sitting in a classroom or out on the soccer field.

Our Goals:

- We will order tests such as:
 - Renal Bladder Ultrasound (RBUS) to evaluate the anatomy and for any abnormalities of the kidneys, ureters and bladder.
 - Abdominal X-ray (KUB) to evaluate for constipation / rectal size, spinal bones.
 - Urinalysis to evaluate for infection, protein, glucose, blood in urine.
 - EMG / Uroflow to evaluate for pre void volume, speed of voiding, muscle contractions while voiding, and post void volume.
- Retrain bladder function with various voiding techniques, schedules and new bathroom habits.
- Retrain bowel function to eliminate constipation and decrease the impact clogged big colons /rectums can have on urinary health.
- Discuss various adjunct therapies such as bedwetting alarms / medications / alarm watches as appropriate.