Potty Training and Dysfunctional Elimination Syndrome

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Successful potty training is a great accomplishment for both parents and children. It can save time and money, as well as open a myriad of social options for families when exploring babysitters, school, and travel. When a child becomes toilet trained, it often translates into a form of “instant power and independence” for them. Likewise, they can also experience a great sense of self-esteem by mastering this task.

A detailed review of the current literature suggests that the age of potty training in the United States has become delayed over the last 60-80 years with the majority (98%) being successful by 36 months of age. This trend appears to be due to the availability of disposable diapers. However, more than 50% of children, around the world, are potty trained by age one. This is simply done out of necessity as a majority of families can’t afford disposable diapers, nor do they have the facilities to wash cloth diapers. “Readiness” to potty train can start as early as 18 months, but cognitive, psychological, and motor skills must be intact before beginning.

Nighttime bladder control usually occurs later due to the complexity and skill needed to awaken from deep sleep to the signal of a full bladder. Ten percent of 6 year olds still wet the bed. By age 15, less than one percent will have bed wetting.

The potty trained child is expected to have complete control of their bladder and bowels. They should know when it is time to go to the bathroom and be able to evacuate their bladder or bowels without problems, right? Surprisingly, this is not always the case as primary care doctor’s offices and pediatric urology clinics across the nation are experiencing an epidemic of children diagnosed as “dysfunctional eliminators”, or sometimes referred to as “dysfunctional voiders”.

Obviously these are not “life threatening” medical issues, but the appointments can simply not be booked fast enough to satisfy pediatricians and parents frustrations with this escalating problem.

The task of potty training is learning how to control the bladder and bowel, during the waking hours, until it is appropriate to use the bathroom. To most of us, this process may seem easy, but it is actually quite complex for children of all ages. Even if your child has been properly potty trained, they can regress and learn abnormal toilet behaviors.

There are four components involved in the voiding process:

1) The bladder must become full enough of urine to send a SIGNAL from the bladder, up the spinal column and to the brain.  
2) A SENSATION or PERCEPTION of “bladder fullness” must be recognized.  
3) ACTION must be taken to go to the restroom and voluntarily RELAX the urinary sphincter muscle that holds the pee in.  
4) Relaxation of the voluntary sphincter causes an “involuntary or automatic” CONTRACTION of the bladder (detrusor) muscle resulting in voiding.

The coordination of these four steps is crucial to successful voiding, establishing optimal bladder habits, and staying dry as well as infection free. These steps are essentially the same to have a bowel movement.

Learning to control and separate these two individual evacuation processes can present even more challenges for the child.

The majority of children are very busy and distractible throughout the day. They often have their own agenda and priorities for the day as well. In comparison to playing and having fun, peeing and pooping are LOW priorities for them. Therefore, they can learn how to “hold on” too long by ignoring these signals the body gives them to go pee and poop. The longer these ignoring behaviors persist, the higher the child’s risk is of developing dysfunctional elimination syndrome. Over time, as the signals become dull, the child...
and bladder simply “grow apart” from each other. This results in decreased sensation and perception of these warning signals. Next, unwanted symptoms such as urgency, frequency, urge incontinence (wetting), constipation (infrequent, large, painful poops), stool incontinence (smearing), abdominal pain, painful urination (dysuria), holding postures, and urinary tract infections (UTIs) begin to present.

In a majority of these cases, these poor bladder and bowel habits are purely behavioral in nature. There is a very small percentage chance that there is something structurally wrong with the anatomy. Treatment simply involves “re-potty training” the child towards good bowel, bladder, and hygiene habits. With intensive behavioral modification, and a lot of help from family, friends, school, but most importantly the child, improvements can be made.

After a very detailed history and physical is done by your provider, they will provide a series of recommendations that follow a detailed “Bowel and Bladder” program. Sometimes urine tests and x-rays will be ordered in addition to the visit. In short, the child must be compliant with a “timed voiding schedule” (every 2-3 hours), practice unhurried and relaxed voiding posture, and have meticulous hygiene and wiping habits. Any form of constipation must be managed aggressively. Elimination of unwanted fluids (soda pop) and diet adjustments are also recommended.

When a child simply can not empty their bladder effectively using strict timed voiding, double voiding (voiding again few minutes after first void), and optimal relaxed voiding posture methods, clean intermittent catheterization (CIC) may be recommended. These are obviously very rare cases and should always be investigated further with bladder studies (urodynamics), renal ultrasound (kidney images), and an MRI (magnetic resonance imaging) to rule out any spinal cord defects that could alter normal bladder function. If CIC is recommended, the use of a Lofric hydrophilic type catheter can help decrease discomfort, minimize urethral irritation and trauma, and lower the incidence of UTIs.

Positive reinforcement is obviously crucial for success. Punishment has no place in potty training and can ultimately result in more resistance by the child, and in extreme cases, child abuse by the caretaker or parent. Most importantly, the family and the child must be consistent, compliant, and motivated to want to change the behavior. Remember, that children will need constant guidance and frequent reminders to make improvements. Additionally, it often takes several weeks, months, or even years for these unwanted symptoms to present. Therefore, it will also take a significant amount of time to correct these habits.

Unfortunately there are no quick fixes or magic pills to cure this frustrating problem, just lots of hard work and patience. The percentage of relapse can also be high as families and children simply “fall off the wagon” and slip back into bad toileting habits again.

References:


Halverstadt Center of Excellence Pediatric Urology Clinic is located at the Children’s Hospital, University of Oklahoma Health Sciences Center in Oklahoma City.

Jake is the clinic manager and a full-time provider who sees all types of urological conditions, runs the dysfunctional elimination clinic, performs all of the post-operative and CIC teaching for the majority urinary reconstructive surgeries, as well as performs and interprets all the video-urolodimetric testing.

Special thanks to his attending physicians: Doctors Bradley P. Kropp, Dominic Frimberger, and William G. Reiner.