

Beyond the Void

A UROLOGY NEWSLETTER

Incontinence is a problem that we all have had at some point in our lives. When we were babies we all had incontinence until we learned to recognize that our bladder was full and we were able to inhibit its contraction until we could get to the bathroom to void. The recognition of the urge to void and the ability to inhibit the bladder are the keys to controlling the voiding reflex. This reflex is not significantly different from a knee-jerk reflex and is initiated by stretch and pressure receptors in the bladder when they reach threshold and stimulate the bladder to contract.

When incontinence occurs later in life it becomes a significant social issue and often a medical problem. To understand the complexity of this condition it is worth talking about types of incontinence and how to deal with them. To do this one must think of voiding as a mechanism that has two parts. The first part is the bladder part and the second is the “sphincter” or outlet part. The bladder’s job is to store urine until it is appropriate to contract and empty. The “sphincter” part is to act as a closed valve while the bladder is storing and open when the bladder is contracting to empty itself. The neurophysiology and anatomic details of how this is accomplished are quite complicated. Suffice it to say that Dysfunction of the bladder or the “sphincter” can lead to incontinence.

The bladder causes of incontinence can be due to a small capacity or volume. It may be from bladder muscle contractions that cannot be controlled either with the urge to void or without the urge to void. These problems can be due to changes within the bladder, such as inflammation, or to problems in the nerves controlling the bladder.

The “sphincter” can be responsible for leakage. The “sphincter” can be responsible for leakage if it is inefficient, weak or out of position. Under ordinary circumstances The bladder neck acts like a sphincter when it is at rest. This is due to the unique arrangement of its muscle fibers at this location. When these muscle fibers contract along with the bladder muscle itself they actually shorten and open this area to let the urine out. When these muscle fibers are at rest they are closed and the bladder neck acts as sphincter mechanism. If this area becomes injured or

scarred or if it is out of position it loses its efficiency and urine will leak out of the bladder

In order to determine whether the cause of urine leakage is a bladder problem or a “sphincter” problem, tests need to be done. These tests are called Urodynamics. They involve filling the bladder while measuring pressure and volume. Adequate sensation and urge to void are assessed at various volumes and the ability to inhibit the urge to void is determined. Bladder contraction pressures and peak and average flow rates help quantitate the quality of the bladder contractions. Closing pressure of the bladder neck(sphincter) and urethra are measured to determine their effectiveness. Mobility of the bladder neck is assessed at different intraabdominal pressures

Once all of this data is collected it can be correlated with the symptoms that are associated with the incontinence. A conclusion can be reached as to whether the leakage is a bladder problem or a “sphincter” problem. Once this is done an appropriate therapy can be initiated. Retesting may be necessary once the therapy has been started. If medical therapy fails or it is not warranted surgery may be the best choice of treatment.

The important issue is to define the primary cause of the incontinence. In that way the best therapy can be chosen and discussed with you. Multiple therapies mean multiple options. Choose an experienced urologist who can offer the most to you.

Stanley H.Shrom M.D.
UroCare
3644 Innovation Drive
Lakeland,Fla. 33812
(863) 646-5789