

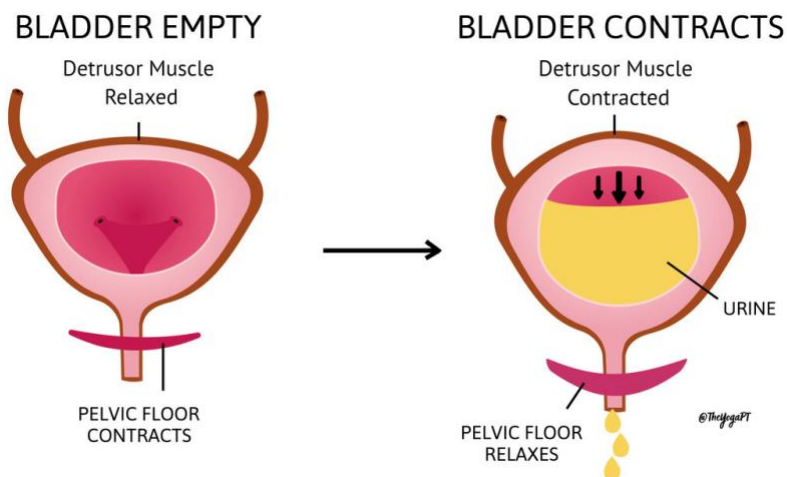


What is Urinary Incontinence?

It is often assumed that loss of bladder control is always due to a weakness within the pelvic floor muscle. Pelvic floor weakness is indeed a cause of incontinence (known as stress incontinence) but incontinence can still occur with a pelvic floor that is working quite normally. Another cause of urinary incontinence is due to a condition called bladder overactivity where incontinence occurs, not due to a weak pelvic floor, but due to a change in the function of the muscle wall of the bladder. The muscle wall of the bladder is called the detrusor muscle and, unlike the pelvic floor, it is a muscle we can't directly control.

The bladder wall and pelvic floor are both muscles and muscles essentially do one of two things, they either contract or relax. When the bladder muscle is relaxed it holds urine without problem and urine stays in the bladder. When the bladder muscle contracts urine is pushed out of the bladder through the urethra (the water pipe that takes urine from the bladder to outside the body). The pelvic floor on the other hand is always doing the opposite of what the bladder muscle is doing. When the pelvic floor contracts it squeezes the urethra closed and so stops urine leaving the bladder but when the pelvic floor relaxes urine can pass easily out of the bladder.

When we are not trying to pass urine (ie. any time other than when we are on the toilet) the bladder muscle wall (the detrusor) should be relaxed and the pelvic floor must be contracted



The only time the detrusor muscle should contract is when we are actively trying to empty the bladder (ie when we are on the toilet). When we voluntarily pass urine the pelvic floor muscle relaxes and the bladder muscle contracts

- To keep urine in the bladder the bladder muscle must be relaxed and the pelvic floor needs to be contracted.
- To empty the bladder the pelvic floor must relax and the bladder muscle must contract

If urine leaves the bladder when we don't want it to this is called incontinence. Incontinence is due to either:

A pelvic floor that is weak (stress incontinence)

or

A bladder muscle that contracts when it shouldn't (urge incontinence)

This is why there are a number of treatments for incontinence as the cause of incontinence varies from person to person, so a treatment that works well for one person may not work for someone else if the cause of their incontinence is different.

There are two main types of incontinence

Stress Incontinence

- This is leakage that usually occurs with physical activity such as coughing, sneezing and physical activity.
- It is due to weakness of the pelvic floor
- Non-surgical treatment is with pelvic floor strengthening by physiotherapy and the use of vaginal oestrogens
- Surgery is with either periurethral injection of a bulking agent, placement of a synthetic or fascial sling or insertion of an artificial urinary sphincter

Urge Incontinence

- This is leakage that occurs associated with a sudden compelling (urgent) need to void that is often associated with an increase in the frequency of trips to the toilet during the day and at night
- It is due to the bladder muscle contracting at the wrong time and can occur even with a normal pelvic floor
- Non-surgical treatment is with lifestyle modifications, bladder training, the use of vaginal oestrogens, medications and neuromodulation
- Surgical treatment is with bladder Botox injections or neuromodulation
- Unlike stress incontinence, urge incontinence is not due to a specific deficiency in a muscle that can simply be repaired with a surgical procedure. It is due to a muscle that is of the required strength but has poor coordination. The bladder muscle is doing the right thing but at the wrong time and treatment is aimed at trying to retrain or re-coordinate the bladder muscle