



Advice on  
**Urinary Incontinence  
and Management**

Urinary incontinence is a condition where sufferers experience an involuntary leakage of urine. Incontinence affects people of all ages. Up to 35% of the population over the age of 60 years old is estimated to be incontinent. Women are twice as likely as men to experience incontinence. (Diane, 2002)

## Types of urinary incontinence

### 1. Stress incontinence

This condition is generally due to weakness in the pelvic floor muscles. Sufferers experience involuntary leakage during 'stressful activities' that cause an increase in the abdominal pressure. *e.g. laughing, coughing, sneezing, walking or lifting heavy objects.*

They tend to visit the toilet often and avoid exercises due to fear of accidental leaking. Although two thirds of sufferers are women, it can happen to anyone.

### 2. Urge incontinence

This condition is commonly caused by an overactive bladder. Sufferers experience involuntary leakage that is accompanied with a strong urge to urinate and frequently feel the need to urinate after drinking small amount of water.

They tend to visit the toilet once every two hours and may even wet their beds at night.



#### **Stress Incontinence**

Sagging and weakness of the bladder neck. Urine leaks during a cough or movement.

### 3. Mixed incontinence

This is a combination of stress and urge incontinence and is most common amongst older women.

### 4. Overflow incontinence

This condition is due to an obstruction to the bladder outlet (caused by conditions such as an enlarged prostate, bladder stones or an enlarged uterus) or impaired function of the bladder muscle (caused by conditions such as diabetes, spinal cord injuries or stroke). Sufferers take a long time to urinate, have a weak, dribbling stream and may experience constant dripping.

### 5. Functional incontinence

Sufferers of functional incontinence may experience leakage while searching for toilets in unfamiliar places or when they do not have access to toilets.

### 6. Transient incontinence

This is usually due to underlying causes such as psychological reasons, medications, infections, restricted movement, constipation and hormonal changes. Once the cause is identified, transient incontinence can be treated.

## Treatment for stress incontinence

The type of treatment depends on the severity of the condition and how it affects one's lifestyle.

### 1. Behavioural changes

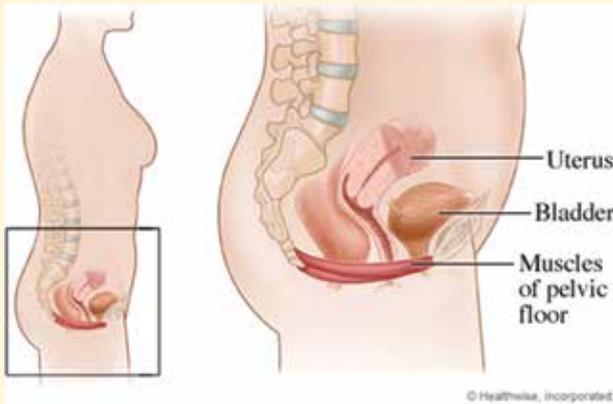
- Fluid intake –  
Drink adequate water; avoid alcoholic, soft drinks, tea and coffee
- Establish a regular voiding pattern –  
Visit the toilet regularly (2 to 3 hourly)
- Quit smoking –  
Smoking irritates the bladder and coughing associated with smoking may lead to stress incontinence during coughing spasms

## 2. Pelvic floor/Kegel exercise

There are layers of muscles that stretch like a hammock from the pubic bone to the backbone. These firm, supportive muscles are the pelvic floor. They help to hold the bladder, bowel and in women, the womb in place, and close the bladder outlet and back passage.

### Female Pelvic Floor Muscle

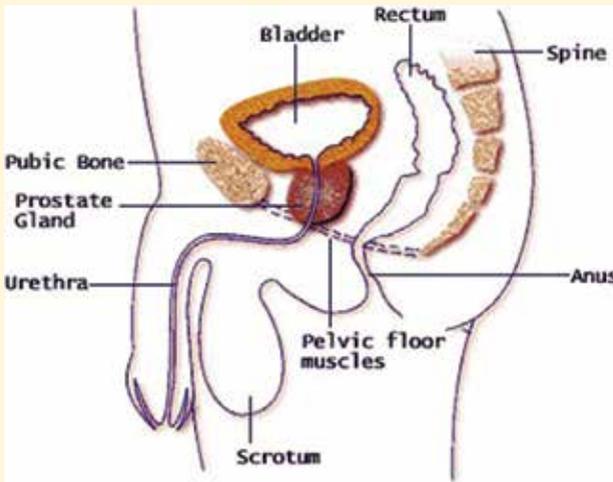
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(Fig 1)

### Male Pelvic Floor Muscle

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(Fig 2)

**Q** What causes the pelvic floor to weaken?

**A** Pelvic floor muscles weaken and sag due to lack of exercise, a change in lifestyle (particularly after treatment of enlarged prostate) or due to age. In women, after childbirth. Weak muscles result in lesser control which may lead to urine leaks.

**Q** How do the pelvic floor muscles work?

**A** The muscles of the pelvic floor are kept firm and slightly tensed to prevent leakage of urine from the bladder, or faeces from the bowel. When passing urine or having a bowel motion, the pelvic floor muscles relax. They tighten again to restore control.

**Q** How will doing pelvic floor exercises help?

**A** Regular pelvic floor exercises will help control both stress and urge incontinence. Patience and discipline are required before the beneficial effects can be felt as these pelvic floor muscles will take several weeks to strengthen.

### Pelvic floor exercise

Sit comfortably with your knees apart. Imagine trying to stop yourself from passing wind. Squeeze the muscle around the back passage. Try squeezing and lifting that muscle. Your buttocks and legs should not be moving. You should be aware of the skin around the back passage tightening and being pulled up and away from your chair.

### Use the 'Stop Test' Method to check if you are doing the exercise correctly

The next time you urinate, try to stop the flow of the urine before you empty your bladder completely. If the stream of urine speeds up when you try to do this exercise, you are squeezing the wrong muscles.

### Practising pelvic floor exercise

This can be done sitting, standing or lying down with knees slightly apart. Slowly tighten and pull up the pelvic floor muscles as hard as you can. Hold for 5 seconds. Repeat at least 5 times (slow pull-ups).

Now pull the muscles up quickly and tightly. Repeat at least 5 times (fast pull-ups).

Do these exercises – 5 slow and 5 fast pull-ups at least 10 times a day. As your muscles get stronger, you can hold for more than 5 seconds and you can do more than 5 pull-ups each time. You will also notice an improvement if you exercise regularly as it takes several months for the muscles to regain their full strength.

### 3. Medication

Some patients may require medication to control their symptoms. Anti-cholinergic agents are commonly used to treat overactive bladder. These medications help to relax the bladder and should be used in conjunction with pelvic floor exercises. Your doctor will prescribe medication only if necessary.

### 4. Surgery

Surgery can be used to treat more severe cases of stress incontinence that do not improve with pelvic floor exercises. It is only recommended after thorough evaluation and determination of the exact cause of urinary incontinence.

## Treatment of urge incontinence

### 1. Bladder training

Bladder training involves delaying urination and is appropriate for sufferers of overactive bladder who have the urge to urinate too often. The aim is to teach the bladder to hold urine so that you eventually urinate every 3 to 4 hours in the day and pass about 250 to 450ml of urine each time. Bladder training does not involve holding the urine until the bladder is overly distended with urine.

#### Keeping your bladder healthy

Try to drink at least 6 to 8 cups (1.5 litres) of water a day (unless advised by your doctor). Do not consume too much alcohol, caffeinated drinks such as coffee, tea or coke, as they irritate the bladder. Do note that instant coffee contains less caffeine than percolated coffee and tea contains less caffeine than coffee.

#### What is normal?

It is normal to go to the toilet between 4 to 6 times a day and no more than once or twice at night.

The elderly may visit the toilet 6 to 8 times during the day and 1 to 2 times at night and should pass out at least 300ml each time.

#### Starting on bladder retraining

- Always make sure you have your urine checked for infection before starting the retraining programme
- Keep a record of your fluid intake and output
- Refrain from visiting the toilet too often
- Learn to 'hold' for as long as possible before going to the toilet; gradually increase

the 'holding' period every day; you may start with 15 minutes and increase the duration by 5 minutes each day

- Keep a record of your progress

## 2. Deferring techniques

You can use the following techniques to put off the urge.

- Pelvic floor contraction
- Sit on the arm of a chair
- Cross your legs firmly
- Distractions (e.g. listen to music)

## 3. Medication

Medication will be prescribed by your doctor (if necessary).

## 4. Pelvic floor exercise

Refer to page 5.

# Treatment for overflow incontinence

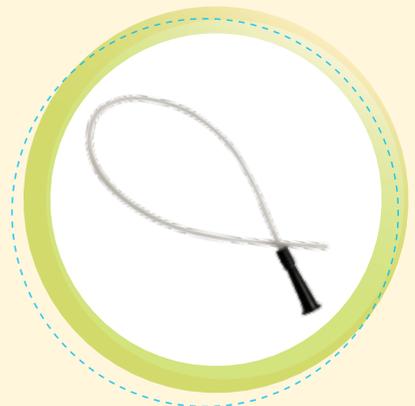
## 1. Surgical removal of obstruction

## 2. Intermittent catheterisation

Intermittent catheterisation involves the placement of a temporary plastic tube (catheter) through the urine passage (urethra) to remove urine from the bladder. This is to prevent urinary tract infection and empty the bladder completely. You will need a plastic tube (catheter), water-based lubricant and drainage container.

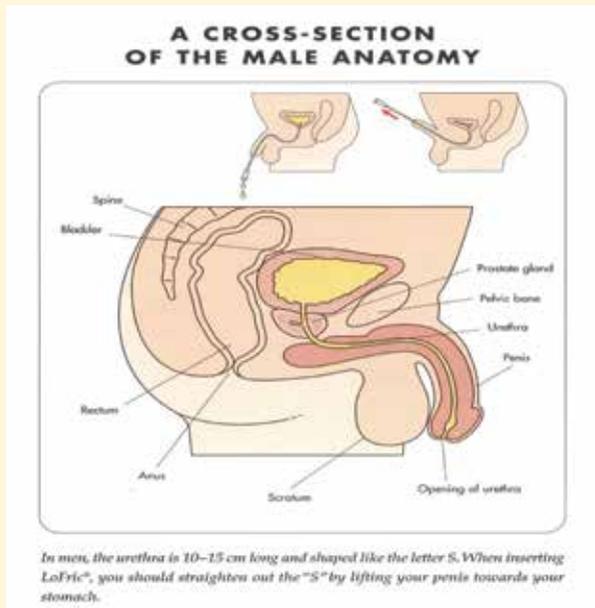
Requisite:

- One receiver for receiving urine
- Disposable plastic nelaton catheter size 10 to 12
- Disposable gloves for carer
- Disposable paper towels
- Lubricant gel
- A piece of soap or a bottle of liquid soap
- A measuring jug for measuring the amount of urine drained



### Intermittent catheterisation for males

1. Assemble all equipment
2. Wash your hands and penis with soap and water
3. Lubricate 4 to 6cm of catheter tip and place other end in the container
4. Insert catheter gently by holding the penis up and out at a 45 degrees angle to your stomach; if it does not go in, take a deep breath and relax



(Fig 3)

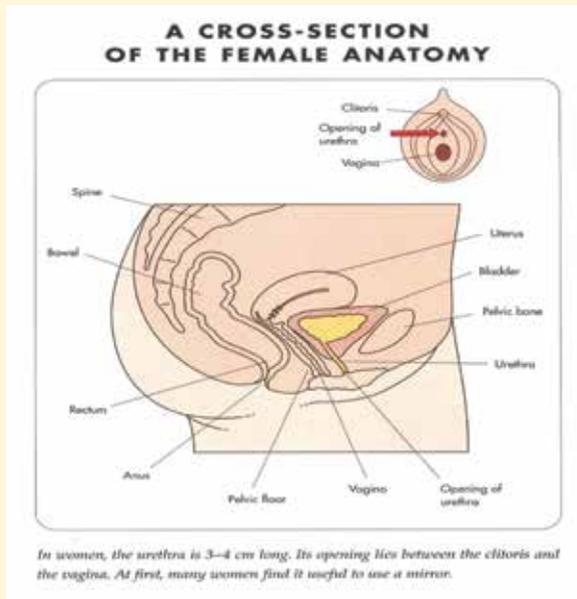
5. Once urine starts to flow, continue to advance the catheter another 2cm and hold it in place until urine flow stops; remove the plastic tube (catheter) gently
6. If you are using a disposable catheter, discard it immediately; if the catheter is reusable, wash it with soap and water and rinse thoroughly; flick the catheter and wipe dry with tissue and store it in a clean re-sealable bag

If the patient is performing the catheterisation himself, it is advisable to change the plastic tube after 7 days.

If a caregiver is performing the catheterisation, it is advisable to change the plastic tube after 3 days or when catheter is dirty and if there is a change in colour.

## Intermittent catheterisation for females

1. Assemble all equipment
2. Wash your hands and genitals with soap and water
3. Lubricate 2 to 4cm of the catheter tip
4. Spread genital area with two fingers
5. Gently insert the catheter into the urethra, guiding it upward towards the belly button; if it does not go in, take a deep breath and relax



(Fig 4)

6. Once urine starts flowing, continue to advance the catheter another 2cm and hold it in place until urine flow stops; remove the plastic tube (catheter) slowly
7. If using a disposable catheter, discard immediately after use; if the catheter is reusable, wash it with soap and water and rinse thoroughly; flick the catheter and wipe dry with tissue and store in a clean, re-sealable bag

If the patient is performing the catheterisation herself, it is advisable to discard the plastic tube after 7 days.

If a caregiver is performing the catheterisation, it is advisable to change the plastic tube after 3 days or when catheter is dirty and if there is a change in colour even before 3 days.

### 3. Indwelling catheterisation

The doctor may also advise patient to leave the urinary catheter in the bladder. This may be a long or short term arrangement and is done by inserting a urinary catheter into the bladder secured by an inflated balloon at the tip of the catheter.

#### Care of the indwelling catheter

1. Always wash your hands with soap and water before and after catheter care
2. Always keep the urine bag at below a level below the bladder to prevent backflow of urine into the bladder as backflow can cause infection
3. Clean the skin around the catheter at least twice daily and after bowel movement
  - a. Use a clean towel, warm water and soap to wash the urinary opening (meatus)
  - b. Wash in a circular motion, moving away from the meatus as this prevents germs from entering the urethra
  - c. Hold the end of the catheter tube to keep it from moving while cleaning
  - d. Always wash the area around the anus last
  - e. Rinse and pat dry genital area and catheter with a clean towel
4. Drink plenty of water unless advised by your doctor
5. Secure the catheter on the thigh or abdomen to prevent pulling which may cause bleeding and hurt the urethra
6. Take care to prevent curling or bending of the catheter
7. Empty the urine bag regularly or when it is  $\frac{3}{4}$  full and use an alcohol swab to clean the urine bag outlet before and after draining of urine
8. Do not detach parts of the catheter unless it is necessary as to prevent infection
9. Watch out for signs of infection and seek medical attention immediately if you experience:
  - a. Fever
  - b. Smelly, cloudy urine
  - c. Blood in the urine
  - d. Pain in the lower abdomen or lower back

## Treatment for functional incontinence

### 1. Environmental manipulation

- a. Place a urinal by bedside for males
- b. Or a female urinal or commode by bedside for females

### 2. Behavioural therapy

- a. Prompted voiding – prompt patient to visit the toilet every 2 to 3 hours
- b. Timed voiding – help patient to void every 2 to 3 hours

### 3. Incontinence undergarment and pads

### 4. External collection devices e.g. penile sheaths (condom catheter) and drip collector for male patients



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