

These notes are for use together with the Colley Model.



Most likely the patient has a voiding difficulty due to bladder outlet obstruction or underactive detrusor, and the symptom of
OVERFLOW URINARY INCONTINENCE

AN OVERVIEW OF OVERFLOW URINARY INCONTINENCE AS A RESULT OF A VOIDING DIFFICULTY

Difficulty in passing or voiding urine occurs either because there is an obstruction to the bladder outlet, or the detrusor (bladder) muscle does not contract sufficiently, if at all, to expel the urine. A volume of urine builds up in the bladder until leakage occurs. This is called chronic urinary retention.



The sudden inability to pass urine, resulting in abdominal pain and distress is called acute urinary retention (AUR) and is a medical emergency.

The symptoms of bladder outlet obstruction and underactive detrusor may be very similar but the underlying causes very different, therefore accurate diagnosis is essential.

Bladder outlet obstruction is more common in men, but can occur in women when the cause generally falls between two broad categories: functional and anatomical (Goldman & Zimmern, 2006).



When there is a volume of urine remaining in the bladder there is a risk of ascending infection which may cause kidney damage.

Reference:

Goldman HB and Zimmern PE, 2006. 'The treatment of female bladder outlet obstruction', *BJUI International*, Vol 98, Issue s1, pages 17-23

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Overflow Urinary Incontinence Contributing Factors

CONTRIBUTING FACTORS IN BLADDER OUTLET OBSTRUCTION (BOO)

Obstruction to the bladder outlet

In male patients obstruction may be caused by an enlarged prostate gland.

In females this may be due to prolapse causing anatomical changes which obstruct the bladder neck, or less commonly following some surgical procedures to alleviate urine leakage.

Other causes include scar tissue in the urethra causing stricture or stenosis, bladder stones, and tumours in the rectum, uterus or cervix.

Damage to the urethra can occur during catheterisation.

A full rectum can cause direct pressure on the urethra.

CONTRIBUTING FACTORS IN UNDERACTIVE DETRUSOR

Neurological conditions

Underlying conditions affecting the nerve supply to the bladder may result in a reduced or absent detrusor contraction for bladder emptying. Examples are diabetes and spina bifida.

Detrusor sphincter dyssynergia describes 'incoordination between detrusor and sphincter during voiding due to a neurological abnormality'. (Haylen BT et al, 2010). This may occur in patients with spinal cord injury or multiple sclerosis for example.

Other factors

Following childbirth, first few hours or days post-delivery

Following the removal of an indwelling catheter

Sudden immobility

The side-effects of various medication one example being overactive bladder medication

Reference:

Haylen BT, de Ridder D, Freeman RM, Swift SE, Berghmans B, Lee J, Monga A, Petri E, Rizk D, Sand PK, Schaer GK An International Urogynecological Association (IUGA) / International Continence Society (ICS) joint report on the terminology for female pelvic floor dysfunction. *Neurourol Urodyn*, 2010,29:4-20; *International Urogynecology J*, 2010,21:5-26


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Overflow Urinary Incontinence Treatment

Advice should be sought from the doctor or Bladder & Bowel Service for those with symptoms identified as a result of possible bladder outlet obstruction or underactive detrusor.

TREATMENT FOR BLADDER OUTLET OBSTRUCTION (BOO)

Obstruction to the bladder outlet - enlarged prostate gland

 Initially ensure men are screened to exclude prostate cancer.

Men with an enlarged prostate gland may be referred to a prostate assessment clinic and / or the Urologist.

Medication

Medication to reduce the size of the prostate gland may be prescribed, and / or medication to relax the smooth muscle at the bladder neck, to enable effective bladder emptying.

Obstruction to the bladder outlet - urethral stricture or stenosis

If suspected, then patients should be referred to the Urologist. Surgery such as urethrotomy may be necessary followed by stricture therapy.

Female patients

Refer women with urinary incontinence that have symptomatic prolapse that is visible at or below the vaginal introitus, to a specialist (NICE, 2019). Also, women with mixed symptoms which may be as a result of bladder outlet obstruction should be referred for specialist assessment.

Double voiding without straining can be helpful for very mild bladder outlet obstruction where there is a low grade mechanical obstruction and surgery is not considered suitable or required. Can also be used for low grade residual urine due to mild underactive detrusor

TREATMENT FOR UNDERACTIVE DETRUSOR

Neurological conditions


Investigations should be considered if an undiagnosed, underlying neurological condition is suspected.

The Queen's Square Bladder Stimulator is a hand held, battery operated vibrating device which can be used to initiate urination and maintain bladder emptying in patients suffering with multiple sclerosis and others who are unable to fully empty the bladder (Dasgupta P et al, 1997)

Management of underactive detrusor

Intermittent catheterisation is the preferred option, carried out by the patient him or herself, or a family member or carer.

BE AWARE

 If the bladder is not fully emptying, there is a risk of ascending infection and damage to the kidneys.

Sometimes an indwelling catheter is required, but this decision is only taken to preserve renal function or manage leakage when no other method has been effective.

Absorbent products

Absorbent products are not a 'treatment' as such but the patient may already be purchasing absorbent containment products as a coping strategy. If so, ensure these are fit for purpose and if not, give general advice about where more suitable products can be purchased from. Some product companies may provide samples before purchase.

[View and download Product Information for the NHS and Care Providers here](#)

For further information on a wide range of products available for users, carers and healthcare professionals, follow this [link to the Continence Product Advisor](#)

Reassessment

Ensure that there is a date documented in the patient's record to assess the effectiveness of the treatment plan.

References:

Dasgupta P, Haslam C, Goodwin R, Fowler CJ. 1997. The Queens Square bladder stimulator. *British Journal of Urology*, 98(s1), pp. 17-23.

Goldman HB and Zimmern PE, 2006. 'The treatment of female bladder outlet obstruction', *BJUI International*, Vol 98, Issue s1, pages 17-23

NICE Guideline [NG123] Published date: April 2019. Urinary incontinence and pelvic organ prolapse in women: management

[Urinary incontinence and pelvic organ prolapse in women: management. NICE guideline \[NG123\]](#)