

Lower Urinary Tract Symptoms (LUTS) in men

What are lower urinary tract symptoms (LUTS)?

LUTS (lower urinary tract symptoms) describes symptoms related to problems of the lower urinary tract (bladder, prostate and urethra). LUTS are broadly grouped into voiding (obstructive) symptoms or storage (irritative) symptoms. A man may have mainly voiding symptoms, mainly storage symptoms, or a combination of both.

urge incontinence (see Table). This type of LUTS may indicate an underlying chronic medical condition such as obesity, diabetes (high glucose levels in the blood), high blood pressure or obstructive sleep apnoea (OSA), or may be due to the effects of smoking. Drinking fluids late at night, too much alcohol or caffeine (tea, coffee, cola drinks), or low levels of physical activity can make storage symptoms worse.

diabetes, high blood pressure or sleep apnoea. For a man with LUTS, reducing caffeine and alcohol (these substances can irritate the bladder), avoiding large amounts of fluid before bed, preventing constipation (straining to pass stools can affect pelvic floor muscles, which are important for both bowel and bladder control), and losing weight may help to improve the symptoms.

When should I see a doctor for LUTS?

LUTS is not just a normal part of ageing so it is a good idea to see your GP if you notice any changes to urination, particularly if the symptoms are affecting your quality of life or interfering with normal daily activities.

Many people think that urinary symptoms in men are a sign of prostate cancer or some other disorder of the prostate. This is not true. Prostate cancer may sometimes be present with urinary symptoms but most often symptoms are not related to prostate cancer, and the LUTS have other causes.

Men can have big prostates but no LUTS, or small prostates and LUTS. So, while a large prostate may be a contributing factor, the presence of LUTS requires a very thorough general check of both physical and psychological health.

If needed, the doctor may refer you to a urologist, who specialise in diseases of the urinary tract and genital organs.

How is the presence and cause of LUTS diagnosed?

The nature of the symptoms being experienced will confirm the presence of LUTS. Further evaluation by a doctor is needed to determine the cause.

The assessment of LUTS starts with a thorough medical history and examination. A medical history includes the type of symptoms, the presence of other health conditions, such as diabetes, high blood pressure,

LOWER URINARY TRACT SYMPTOMS (LUTS) IN MEN

VOIDING OR OBSTRUCTIVE SYMPTOMS	STORAGE OR IRRITATIVE SYMPTOMS
Hesitancy – a longer than usual wait for the stream of urine to begin	Urgency – feeling an urgent need to urinate
Weak stream	Frequency – a short time between needing to urinate
Straining to urinate	Nocturia – waking from sleep to pass urine two or more times a night
Dribbling after urination has finished	Urge incontinence – a sudden, intense urge to urinate followed by an uncontrolled loss of urine
A stop/start stream	

How common are LUTS?

LUTS become more common in men as they get older. However, LUTS can also occur in young men, although the cause of the symptoms may be different. A large Australian study has shown that about one in 14 (7%) men in their 40s, and nearly one in three (29%) men over the age of 70, report moderate to severe LUTS. A smaller Australian study of men 35 to 80 years old found that storage symptoms were twice as common as voiding symptoms (28% versus 13%).

What causes LUTS?

LUTS, especially if it is painful to urinate, may be caused by an acute problem such as a urinary tract infection, or infection and inflammation of the prostate gland (prostatitis).

Storage symptoms may be due to an overactive bladder (OAB). OAB is when there is a feeling of urgency to urinate, usually with frequency and nocturia can happen with or without

Voiding symptoms are usually due to a blockage at the outlet of base of the bladder, making it more difficult to pass urine. The blockage may be caused by an enlarged prostate gland or scarring of the urethra (the tube that carries the urine). Enlargement of the prostate gland can lead to both storage and voiding symptoms and is a common cause of symptoms in men.

Other causes of LUTS include some medicines, and neurological diseases such as stroke and Parkinson's disease. LUTS is also linked with depression and erectile dysfunction.

It is common for there to be several factors acting at the same time to cause LUTS and the exact cause is not always easy to find.

Can LUTS be prevented?

A man is less likely to get LUTS if he has a healthy lifestyle and body weight, does not smoke and gets treatment for any medical conditions such as

obstructive sleep apnoea (OSA), depression, erectile dysfunction, and a review of any medications. Examination includes height, weight, waist circumference, blood pressure and a general examination.

The tests used to determine the likely cause, depend on the man's age and details given in the medical history.

Other tests include one or more of:

- Urinalysis: urine tests to check for signs of infection or cancer in the urinary tract or kidneys
- Blood tests to check the function of the kidneys and liver, blood sugar and fats, Prostate Specific Antigen (PSA) and possibly other tests depending on the circumstances
- Digital rectal examination (DRE): to check if prostate disease is present. The doctor places a gloved finger in the rectum (back passage) to check the size and shape of the prostate, and to feel for problems with the prostate gland
- Urination diary: a diary recording the pattern and frequency of urination and whether the volumes passed are large or small. These diaries are particularly helpful for men with storage symptoms. If there is concern about large volumes, urine may be collected over 24 hours to measure to the total amount
- Ultrasound: used to measure the amount of urine left in the bladder after urination and to check the prostate
- MRI: under certain circumstances, for example if cancer is suspected, the prostate may be looked at using magnetic resonance imaging (MRI)
- Cystoscopy: a small video telescope is inserted into the penis via the urethra.
- Sleep study: OSA is present in 50 per cent of men over 40. Severe OSA is frequently associated with LUTS and so should always be considered. Severe OSA need not be accompanied by sleepiness.

LUTS TREATMENTS

Management of underlying conditions and lifestyle measures

- Managing medical conditions such as obesity, hypertension, obstructive sleep apnoea, heart conditions, kidney conditions and diabetes; review of use of medicines
- Changes in diet, including a reducing intake of processed and refined foods, particularly refined carbohydrate, increase both aerobic and resistance physical activity,, minimise and preferably stop alcohol intake and limit caffeine to the early parts of the day.

Oral medicines (tablets)

- Alpha-blockers – relax the bladder outlet and the muscles of the prostate gland; used to help symptoms due to prostate enlargement
- Anticholinergics (or antimuscarinics) – reduce contraction of the bladder; used to help storage symptoms or overactive bladder
- Long-acting phosphodiesterase inhibitors (tadalafil) – used to treat erectile dysfunction but also help reduce symptoms of LUTS
- 5-alpha reductase inhibitors – only used if the prostate is enlarged and usually taken in combination with alpha-blockers. Note that 5-alpha reductase inhibitors may lead to erectile dysfunction and loss of libido (sex drive) which can be long lasting

Surgery (for LUTS due to prostate enlargement or other obstruction)

- Transurethral resection of the prostate (TURP)
- Bladder neck incision
- Holmium laser enucleation (HoLEP)
- Green light laser (PVP)
- Urolift
- Rezum
- Aqua-ablation

How are LUTS treated?

When deciding on the best treatment, the doctor takes account of the type of LUTS, the cause of the LUTS, and other factors such as the degree of bother caused by the LUTS and lifestyle factors.

Lifestyle changes (avoiding caffeine and alcohol in the evening, increasing physical activity and reducing refined carbohydrate intake) or managing other health conditions such as obesity, diabetes, hypertension or OSA may be the first option. If symptoms are not very bothersome, the best approach

may be to monitor the LUTS through regular checks with the doctor.

If the LUTS are bothersome, oral medicines (tablets) can help. The medicine suggested by the doctor will depend on the type and cause of LUTS. In some cases several medicines may be tried to see if they improve symptoms.

Surgery is only done in severe cases of prostate enlargement or other serious causes of obstruction. Surgery is the most effective treatment for relieving symptoms caused by an enlarged prostate but it has potential side-effects.

Expert reviewers

Professor Gary Wittert
MB BCh, MD, FRACP, FRCP, FAHMS
University of Adelaide and Royal Adelaide Hospital

A/Prof Nick Brook
BSc MSc BM FRCS(Urol) MD FRACS(Urol)
University of Adelaide and Royal Adelaide Hospital

Andrology Australia is an initiative funded by the Australian Government Department of Health School of Public Health and Preventive Medicine, Monash University
553 St Kilda Road, Melbourne, Victoria, 3004 Australia



Date reviewed: July 2018

© Andrology Australia 2015

The information in this fact sheet has been provided for educational purposes only. It is not intended to take the place of a clinical diagnosis or proper medical advice from a fully qualified health professional. Andrology Australia urges readers to seek the services of a qualified medical practitioner for any personal health concerns.