

I'm Going So Often!

Help for the overactive bladder *by Dr Gerald Tan*

OVERACTIVE BLADDER IS a condition where patients experience urgent sensation in passing urine, frequent urination, and may leak urine before they are able to reach the bathroom. These symptoms may appear singly or in combination, in the absence of identifiable causes such as bladder infections or tumours. It is also referred to in scientific papers as detrusor instability or detrusor hyperreflexia.

If left untreated, patients may experience:

- Skin breakdown, fungal infections or recurrent urinary tract infections from involuntary urinary leakage
- Damage to bladder and kidney function
- Social withdrawal, as patients are embarrassed by their urinary leakage and constant need to pass urine

How many people does it affect?

Overactive bladder is a very common disorder, affecting one in seven people over the age of 40 years. Women are more likely than men to experience such symptoms, and account for one in seven women with involuntary urinary leakage. In men, overactive bladder symptoms usually occur against a background of chronic blockage of the bladder outlet due to enlargement of the prostate.

What causes this condition to occur?

In most patients with overactive bladder, there is no identifiable cause. In some conditions such as spinal cord injury, stroke, Parkinson's disease, multiple sclerosis and dementia, the nerve reflexes in the spinal cord are affected, resulting in involuntary bladder muscle contractions. Other causes include blockage of the bladder outlet by an enlarged prostate, infections and scars of the urethra.

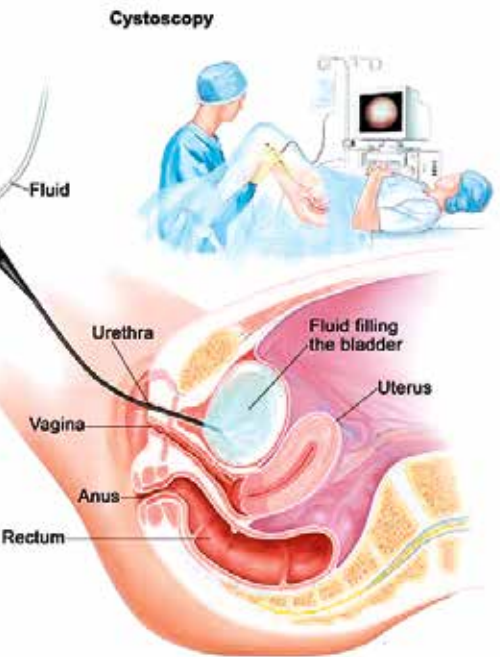


Figure 1. Flexible cystoscopy of the bladder, urethra (and prostate in men). Image courtesy of the US National Cancer Institute, National Institutes of Health

How is overactive bladder diagnosed?

A diagnosis of overactive bladder is reached by excluding other common medical causes, such as bladder infections, stones, tumours etc. After a detailed history and physical examination, your urologist will usually order some laboratory tests to look for urine infection and assess the kidney function. He will perform an ultrasound scan of the bladder and kidneys, and cystoscopy to look for lesions in the bladder (Figure 1). Lastly,

In a nutshell

- ▶ Overactive bladder is a common condition characterised by urinary frequency, urgency and/or involuntary urinary leakage
- ▶ It is diagnosed after excluding bladder pathologies such as stones, infections and tumours
- ▶ Most cases can be successfully treated with medications taken orally or administered directly into the bladder wall

a uroflowmetry study will demonstrate how well your bladder empties, and how much urine is left in the bladder after it has emptied (Figure 2).

Can overactive bladder be successfully cured?

Yes! For mild cases, many patients will notice an improvement in their symptoms simply by cutting down on coffee, tea, alcohol, and tobacco smoking, as well as making changes to their fluid intake patterns. Oral medications such as antimuscarinics (Detrusitol™, Vesicare™ etc) often result in swift improvement in symptoms for the majority of patients. However, such medications cannot be used in patients with narrow-angle glaucoma, delayed gastric emptying or urinary retention.

In a minority of resistant cases, oral medications alone may be ineffective. Your urologist will then need to perform a detailed evaluation of your bladder function, known as a videourodynamic study. Once confirmed, your urologist may recommend you to consider intravesical



Figure 2. Uroflowmetry assessment to assess how well the bladder empties during urination

Botox injections. This is a short procedure lasting less than 15 minutes performed under sedation, where Botulinum A toxin (Botox™) is injected in small doses directly into the bladder wall via a cystoscope (Figure 3). This acts effectively to block the nerve impulses from the bladder, relieving the involuntary contractions. However, its effects usually only last about nine months, and patients may require repeated injections into their bladders over the long term for adequate control of symptoms.

Reconstructive surgery to enlarge the bladder or stimulate the sacral nerve is usually reserved as treatment of last resort when the above measures have proven ineffective. eh

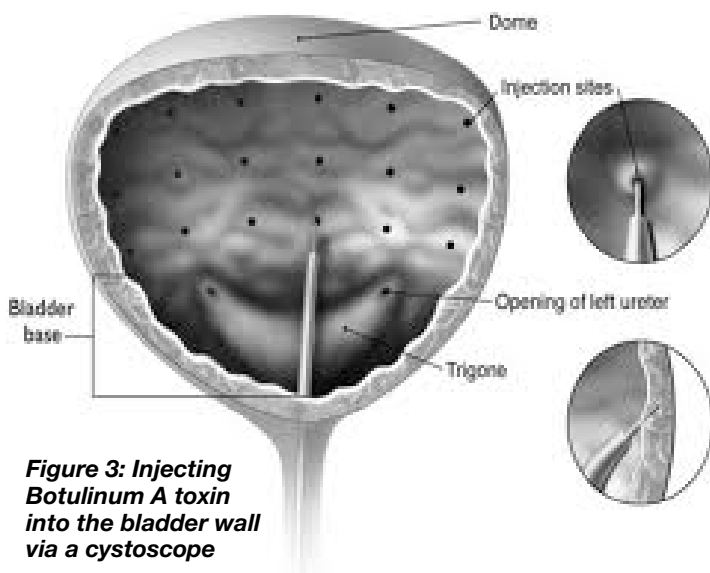


Figure 3: Injecting Botulinum A toxin into the bladder wall via a cystoscope



Dr Tan Yau Min, Gerald is a Consultant Urologist at Mt Elizabeth Hospital with over 17 years of clinical experience. He is internationally renowned for his expertise in minimally invasive and robotic surgery for prostate, kidney and bladder diseases. Dr Tan was one of the first surgeons to pioneer robotic nephron-sparing surgery in Asia, having performed the largest number of such surgeries in Mt Elizabeth Novena and Tan Tock Seng Hospitals to date. He has received numerous top international awards for academic and clinical excellence, and was named the Outstanding Young Urologist of Asia by the Urological Associations of Asia in 2012. He may be contacted via email at enquiries@drgeraldtan.com.sg.

References:

- Diagnosis and treatment of overactive bladder (non-neurogenic): AUA/SUFU 2014 Guidelines.
- Sacco E, Bientinesi R. Future perspectives in pharmacological treatments options for overactive bladder syndrome. *European Urology Reviews* 2012;7(2):120-126.
- Milsom I, Abrams P, Cardozo L, Roberts RG, Thuroff J, Wein AJ. How widespread are the symptoms of an overactive bladder and how are they managed? A population-based prevalence study. *BJU International* 2001; 87(9): 760-6.