February 2014

Specialists in Focus

Dr Chua Wei Jin

MBChB (UK), MRCSEd, MMed (Surgery), FAMS (Urology)

Consultant,
Clinical Director of Endourology,
Department of Urology,
University Surgical Cluster

Dr Chua Wei Jin graduated from the University of Bristol, UK in 1997. He obtained his specialist degrees in surgery from the Royal College of Surgeons of Edinburgh and Master of Medicine, Surgery (Singapore) in 2001 and 2003 respectively.

He has completed his advanced specialist training in Urology in 2006, and is currently a Consultant with the Department of Urology at the National University Hospital. He is also a clinical lecturer to the Assistant Professor at the National University of Singapore.

His current practice at the National University Hospital includes all areas of general urology with special interest in Minimally Invasive Surgeries, Endo-urology, Laparoscopic and uro-oncology surgeries. Dr Chua started the Day Surgery Transurethral Resection of Prostate (TURP) program in NUH in 2005 and is currently the co-director of the program.

In 2010, he introduced a minimally invasive therapy for benign enlargement of prostate (Transurethral Needle Ablation of Prostate or TUNA in short) which he has been doing in the outpatient clinic under local anesthesia.

Dr Joe Lee

MBBS (S'pore), MRCS (Edin), MMED (Surg), FAMS (Urology)

Consultant,
Department of Urology,
University Surgical Cluster

Dr Joe Lee is a Consultant at the National University Hospital, Department of Urology. He graduated from the National University of Singapore in 2000 and obtained his specialist degrees in surgery from the Royal College of Surgeons of Edinburgh and Master of Medicine, Surgery (Singapore) between 2005 – 2006.

After obtaining his specialist accreditation, he did an andrology fellowship at Canada's St. Joseph Hospital, University of Western Ontario, sub-specializing in male prosthesis surgery and male infertility.

Dr Joe Lee is actively involved in clinical trials and research in the field of Men's Health. His special interests are in male sexual dysfunction, male incontinence, male infertility, male genitourinary prosthesis surgery, endourology and stone diseases.

Clinical Updates

NEW TREATMENT FOR ENLARGED PROSTATE

Benign Prostate Hypertrophy (BPH), or commonly known as prostate enlargement, is a non-cancerous enlargement of the prostate gland.

This enlargement is due to exposure to male hormones and is one of the most common urological problems affecting men over fifty years old. Globally, it is estimated that BPH affects 40 per cent of men aged 60 and above.

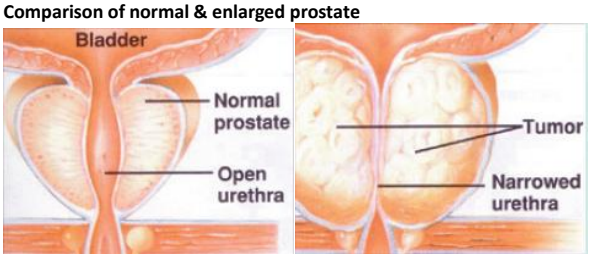
This condition can affect the quality of life of both men and their spouses, with interrupted sleep at night and disruptions to daily routines due to the frequent need to visit the toilet.

What and where is the prostate gland?

The prostate is a walnut-size gland present only in males. It is situated at the outlet of the bladder, encircling the lower urinary outlet like a doughnut. It produces secretion, which nourishes the sperm in the semen.

Problems with urinating and discomfort occur when the enlarged prostate squeezes the bladder outlet and the lower urinary passage like a clamp around a garden hose. In severe cases, this blockage may damage the bladder and kidneys.

Comparison of normal & enlarged prostate



Normal prostate does not interfere with the urethra or urination

How prostate problems are diagnosed

Patients with prostate enlargement often present with the following urinary symptoms:

- Difficulty in starting urination (hesitancy).
- A weak urinary stream.
- Interruption of the stream ('stopping' and 'starting' effect).
- Sensation of incomplete bladder emptying.
- Urgency (the person has difficulty in holding the bladder).
- Frequent urination.
- Waking up frequently at night to urinate (Nocturia).

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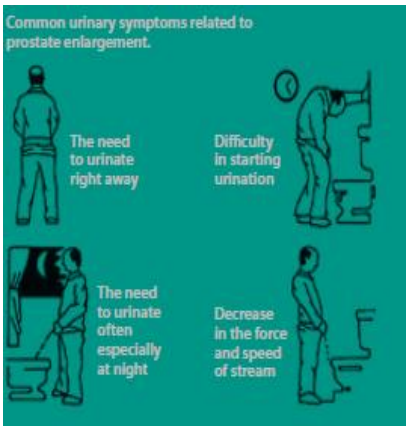


Prolonged blockage of the urine tract over time can cause serious problems. These include:

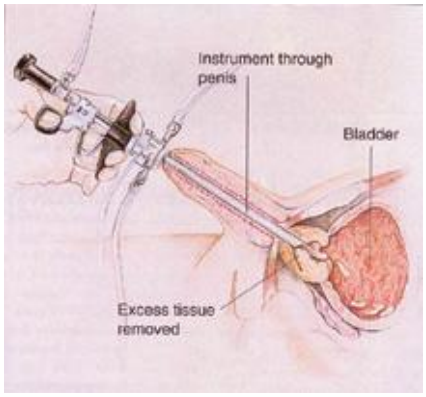
- Sudden inability to urinate (acute retention of urine).
- Urinary leakage/ incontinence (chronic urinary retention).
- Recurring urinary infections.
- Bladder stone formation.
- Presence of blood in the urine.

Some of the tests that may be helpful to pinpoint the cause of the symptoms include a digital rectal examination, ultrasound scan, uroflow test. Specialised tests like cystoscopy and urodynamics study may be needed in selected cases.

Treatment of BPH

The treatment would depend on the severity of the condition. In mild BPH, there is no significant blockage of the bladder and the symptoms are not bothersome.
Most of these patients can be managed with an adjustment in their fluid intake, regular exercise, and a proper diet. In moderate BPH, the blockage of the bladder is not severe but the symptoms are bothersome. Medication can be used to treat these cases to either relax the bladder outlet or help shrink the prostate, to improve the flow of urine.

In a more serious condition, the blockage is severe and patient is unable to empty the bladder completely. Surgery will then be considered. The gold standard for surgical treatment for prostate enlargement is transurethral resection of the prostate (TURP).



In TURP, the obstructing part of the prostate gland is removed using a special instrument called the resectoscope that is inserted via the urinary passage. This procedure is done under general anaesthesia or regional anaesthesia.

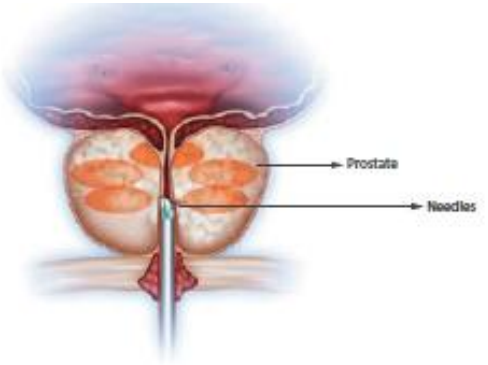
The amount of prostate tissue removed will depend on the size of the prostate gland. This is an in-patient procedure with an average length of stay of 3 days.

The latest procedure that is available now is transurethral needle ablation of prostate or TUNA in short. It is minimally invasive and can be done under local anaesthesia in the outpatient setting. The prostate gland is ablated using radiofrequency waves. The heat generated causes the prostate gland to shrink. As the prostate is not resected or cut, this procedure is less invasive and has a lower risk of complications like bleeding, retrograde ejaculation and urinary incontinence.

How Does TUNA work?

Using radiofrequency waves, two needles are inserted into the prostate. The heat generated causes the prostate gland to shrink. The procedure takes about 30 minutes. Patients will be discharged a few hours later with a urinary catheter (i.e. to have a tube inserted into the urinary bladder to drain the urine), which can be removed within two to three days after the procedure.

TUNA in progress



Main advantages of TUNA compared to TURP:

- Can be done under local anaesthesia.
- Shorter procedure time.
- Lower risk of complications (e.g. incontinence, retrograde ejaculation).
- Less invasive with minimal blood loss.

Who can be considered for TUNA?

Patients with mild or moderate bladder obstructive symptoms who:

- Are not able to tolerate the side effects of medication (which can include giddiness, lethargy and drop in blood pressure).
- Do not wish to continue with long term medication because of cost considerations

Our experience with TUNA

TUNA has been increasingly used in the United States and it has shown to be safe and effective in relieving the symptoms of BPH. Our initial experience with TUNA has shown it to be a safe clinic-based procedure.

Shaping Medicine for the Future

CME Registration: https://nuhcme.com.sg/

Patients treated with TUNA have shown statistically significant symptomatic relief from bothersome symptoms. We noted that not all patients on medication experience significant voiding improvements. Some men face undesirable side effects and prefer a different management rather than remaining on a long-term medication.

TUNA fills a void between medical therapy and TURP by being a compromise between the limited efficacy of drug treatment and the invasiveness of surgery.

While TUNA may not necessarily reach the same efficacy as TURP, it has the advantages of low treatment related morbidity. Instead of competing with medical treatment or TURP, TUNA can be included as one of the treatment options for suitable patients with enlarged prostate.

We proposed TUNA as a second-line treatment when medical therapy fails to improve a patient's obstructive and irritative symptoms. In addition, TUNA can be considered for patients who wish to avoid surgical treatment or who are not fit for surgery. It can also be proposed to patients who wish for a rapid treatment in an outpatient management, or a preserved sexual function.

Clinical Updates

NEW CURE FOR RARE EATING DISORDER – NO SCAR, NO COMPLICATIONS FOR ACHALASIA PATIENTS

For years, mealtimes were a nightmare for a 63-year-old retiree, Mr Chandra. A rare disorder, known as achalasia, meant food would get stuck in his oesophagus, the muscular tube channelling food from the mouth to the stomach, and caused him extreme discomfort.

It could take him as long as three hours to finish a bowl of porridge. "It was mentally very stressful," said Mr Chandra, who did not want to give his full name. "I felt totally miserable."

That was until October last year, when he went for a procedure that has been made available for the first time in Singapore. In the last year, he and five other patients at the National University Hospital (NUH) have undergone peroral endoscopic myotomy, or POEM for short – a scarless procedure with good results and no complications.

POEM involves sending a flexible tube called an endoscope through the patient's mouth into his oesophagus to cut the muscle fibres that are preventing food from entering the stomach.

Achalasia, which affects about one in 100,000 people worldwide, occurs because a muscular ring in the food pipe – the lower oesophagal sphincter – fails to relax to allow food to enter the stomach. Over time, the oesophagus becomes dilated. This worsens the problem, according to Associate Professor Jimmy So, Head and Senior Consultant at the Division of General Surgery (Upper Gastrointestinal Surgery) at NUH.

Before POEM was developed, doctors would divide the muscle by making five or six small cuts in the abdomen, in what is known as laparoscopic myotomy. Another procedure, known as balloon dilation, involved inserting and dilating a balloon through the mouth to tear the sphincter muscle.

However, this procedure puts patients at a 4 per cent risk of suffering a perforated oesophagus, which can cause surrounding organs to get infected. This risk stands at 1 per cent for laparoscopic myotomy and is further slashed to 0.5 per cent with POEM.

It is hoped that POEM, which was first used in Japan in 2008, will be a permanent cure for all grades of achalasia, although long-term and comparative studies are not available yet.

Overseas studies have reported a success rate of more than 90 per cent after a year. Prof So said POEM has been performed in China, Hong Kong, South Korea, North America, the Netherlands, Germany and Italy.

POEM is cheaper, costing between $4,000 and $5,000 for a subsidised patient including hospital stay, compared to $5,000 to $6,000 for laparoscopic myotomy. Prof So said it also involves a shorter hospital stay of two or three days, compared to up to five days for laparoscopic myotomy.

Source: The Straits Times (Published on 22 January 2015)

Upcoming CME Events

Date	Topic
7 March	Atrial Fibrillation- Know What the Rhythm is Saying
7 March	Doctors Interactive Session on Food Allergy
21 March	Partners in Colorectal Cancer – You and NUHS
28 March	Sport Medicine Updates

Registration & Lunch will start at 12.30 PM

Event Venue:
NUHS Tower Block, Auditorium, Level 1
1E Kent Ridge Road, Singapore 119228

Please CALL us @ 6772 5695 / 5079 for registration & enquiries or visit our CME Portal @ https://nuhcme.com.sg/.