



Message from the Chief Hospital Manager

Dear Colleagues,

Now that the number of new cases of Covid-19 disease has come down to a couple of thousands, we can finally breathe a sigh of relief, hoping that we shall not witness the sixth wave, so to speak. However we should not let down our guards and we should still observe strict person hygiene and keep to the schedule of booster vaccination in order to build up herd immunity. Hopefully with the efforts of everyone of us in the community, our city may open up to quarantine free travels for local residents and foreign visitors. I really long for the day when I can travel freely to visit my daughters, relatives & friends overseas. As to the recent numbers of mutual strains of Omicron appearing, such as the BA.2.12.1 subvariant, it seems that they may be slightly more transmissible but their lethal pathogenicity does not appear to be prominent. Hence we should not worry too much on the significance nor likelihood of the 'six' wave.

Going into the month of May, our hospital has witnessed a gradual recovery in attendances of our specialist clinics, hospital admissions and surgical operations / procedures. Various clinical performance indices are back to the pre-sixth wave levels, i.e. those of January 2022. Meanwhile, there was a significant decrease in the numbers of Covid-19 PCR test requests, actually 50% drop in May from about 5900 in April and the number of positive cases became a rarity! There is certainly encouraging light at the end of the tunnel and we hopefully shall soon be out of the woods!

In June this year we shall be going into the thirteenth anniversary of hospital accreditation by the Australian Council of Healthcare Standards International (ACHSI). It so happens that Union Hospital will be going into a new cycle at the same time that ACHSI adopts a new system of 3 year cycles. During the three years, there will be three accreditation activities, namely one Organization Wide Survey (OWS) and two Focused Advisory Checkpoints (FAC) more or less one per year. With OWS, a number of overseas surveyors as well as local surveyors will be necessary but this will prove to be impossible at the present moment. Hence we shall start the ball rolling with a FAC in the latter part of this month, i.e. June. There will be an overseas lead surveyor who will chair the assessment visit in the format of a ZOOM meeting. Topics to be discussed will be as follows: - recommendations for improvement identified during the last Periodic Review; self-initiated improvements achieved; clinical performance indices and risk management issues. We will probably have our OWS in mid-2023. These accreditation activities will be based on standards and criteria of the new edition of EQUiP 7. We should not have any problem with the coming FAC, especially with the good results as commented by ACHSI on our Clinical Indicators (CIs) submission for the second half of 2021 - out of 51 CIs which could be compared quantitatively with other international institutions, 26 performed statistically better than the International General Average. Union Hospital will be awarded the 'High Performing Organization Award' for submitting at least 20 CIs during a 6-month reporting period with at least 10 performing significantly better than the International General Report Rate. Moreover there were no CIs from Union Hospital performing statistically worse significantly than the International General Rate.

I am also pleased to inform our friends and colleagues that the higher management team of our hospital have been strengthened with two newly admitted members. They are namely, Dr Yannie Soo as Assistant Chief Hospital Manager and Dr. Cheung Chin Pang as Assistant Medical Director. You would have read more about these two senior executives of ours in the last issue of this newsletter. It is with these high notes that I would like to end my message for now.

Yours most sincerely,

Dr Anthony K Y Lee
Chief Hospital Manager & Medical Director

Personalized Surgical Treatment for Benign Prostatic Enlargement

Dr Cheng Kwun Chung
Specialist in Urology
Union Hospital



Lower urinary tract symptoms (LUTS) related to benign prostatic enlargement (BPE) are common as men age(1, 2). Surgical treatment for BPE is offered to men who have moderate or severe LUTS and failed medical treatment, or men who have experienced complications from BPE(3). The well-known gold standard, transurethral resection of prostate (TURP) has been introduced for almost a century. However, TURP has its own limitations. It fails to manage men with very large prostate (more than 80cc); it often results in significant ejaculatory dysfunction; it requires general or spinal anaesthesia which may not be suitable for some elderly patients; and it is difficult to be performed as day surgery as bladder irrigation is often required after surgery.

Numerous new BPE surgeries have emerged in the recent two decades in attempt to overcome the limitations of TURP(4). This article would introduce some of the popular novel techniques, and discuss their merits and disadvantages.

Endoscopic Enucleation of Prostate (EEP)

Endoscopic enucleation of prostate (EEP) replicates the technique of the oldest BPE surgery, open prostatectomy, to enucleate the prostate adenoma endoscopically through a transurethral route. The whole adenoma is dissected out along the prostate capsule and is dislodged into the bladder. A morcellator is used to morcellate and evacuate the enucleated prostate tissue afterwards.

Different energy source can be utilized for enucleation. These include holmium:YAG laser, which can be used to blast open the surgical plane by collapse of cavitation bubbles and to provide haemostasis; or the mechanical force of the endoscopic sheath with laser or electrical energy for haemostasis. Holmium laser enucleation (HoLEP) is the most popular and established technique among all EEP surgery. Comparing with open prostatectomy in dealing with large prostate, HoLEP provides a shorter hospital stay and faster recovery, a better haemostasis with a lower transfusion rate(5). Comparing with TURP in treatment of moderately-sized prostate, HoLEP offers better symptom and flow improvement, and a lower retreatment rate(6).

HoLEP or EEP has now been regarded as the standard technique for men with large prostate more than 80cc. It is also an alternative option for all men considering BPE surgery with the benefits of excellent symptoms and flow improvement. The downside of HoLEP is the longer operative time compared with TURP, and the significant ejaculatory dysfunction after surgery(6).

Convective water vapour energy (WAVE) ablation: The Rezum system

The Rezum system utilizes radiofrequency to create thermal energy in the form of water vapour (Figure 1). A special designed endoscopic device is inserted through the urethra to deploy a needle into the prostate adenoma. Steam is then injected into the adenoma and the heat is dissipated when the steam condenses. The resultant coagulative necrosis will lead to shrinkage of the prostate after a few weeks.



Figure 1 : The Rezum system

Rezum can be performed as an office-based day procedure under local anesthesia.

Majority of men can be discharged on the same day. Two to three injections are usually needed for each prostate lateral lobes.

Extra injections can be delivered to the median lobe if it is enlarged.

Since the clinical effect of Rezum takes few weeks to occur, the early tissue oedema and pain after surgery will cause retention of urine in many patients. A urethral catheter is routinely inserted for 4-7 days after surgery. The symptoms and flow improvement were significantly improved at 3-month compared with a sham arm in a multicenter randomized trial. These improvements were sustained at the reported two-year and four-year results of the same study cohort. Surgical retreatment rate was 4.4% at four years(7).

Currently Rezum is indicated for men older than 50 years of age with a prostate volume between 30cc and 80cc. The superiority of Rezum are the feasibility of day surgery, fast recovery, and preservation of ejaculation function. It can be recommended to younger men who desire a one-off treatment option to replace long term medications, but without the ejaculatory dysfunction that occurs after conventional surgery. One drawback of Rezum is the need for temporary urinary catheter in the early post-operative period(8).

Prostatic urethral lift (PUL) - Urolift®

PUL is a suture-based permanent implants made of three components – a nitinol capsular tab; a surgical steel endplate at the urethra; and the PET suture to connect the two metal parts (Figure 2). The suture is deployed endoscopically with a delivery device. The deployed implant will compress the adenoma underneath. Firing of the implants to bilateral prostate lobes will lead to creation of a patent anterior prostatic channel.



Figure 2 - Prostatic urethral lift (PUL) - Urolift®

Similar as Rezum, PUL can also be performed as an office-based day procedure under local anesthesia. Four to six implants are usually needed in a single surgery. With an immediate opening of prostatic channel, a urethral catheter is not required after the operation. PUL is well-proven in achieving a significant improvement in symptoms and urinary flow rate. In a multicentre RCT comparing PUL with sham, IPSS was improved by 50% at 3-month. The peak urine flow rate was increased significantly from 8.1 to 12.4 mL/s. These improvements are sustained at 5-year follow-up(9). In another RCT studying PUL and TURP, there was no ejaculatory dysfunction in PUL arm with 40% in the TURP group. The postoperative recovery after PUL is also faster. However, the symptoms and flow improvements are greater in TURP arm(10).

The target recipient of PUL is very similar to Rezum. PUL is indicated for men with LUTS who are interested in preservation of ejaculatory function. It is technically feasible for men with prostate smaller than 80cc. A limitation of PUL and Rezum is the lack of long-term results, which should be discussed thoroughly with patients before embarking for surgery(8).

Conclusions

The aforementioned options are just few examples out of the many available treatments for BPE nowadays. The wide range of options provide personalized choice for men who suffer from BPE and its complications. The novel office-based procedures have also expanded the indications of surgery to those with stable LUTS but wish to live without medications. The role of TURP will be challenged by these new promising techniques.

References

1. Martin SA, Haren MT, Marshall VR, Lange K, Wilbert GA, Members of the Florey Adelaide Male Ageing S. Prevalence and factors associated with uncomplicated storage and voiding lower urinary tract symptoms in community-dwelling Australian men. *World J Urol.* 2011;29(2):179-84.
2. Yeo CR, Chan CK, Tsch JYC, Chiu PKF, Wong JHM, Chan ESY, et al. Survey on prevalence of lower urinary tract symptoms in an Asian population. *Hong Kong Med J.* 2019;25(1):13-20.
3. Gratzke C, Bachmann A, Descazeaud A, Drake MJ, Madensbacher S, Marmoulakis C, et al. EAU Guidelines on the Assessment of Non-neurogenic Male Lower Urinary Tract Symptoms Including Benign Prostatic Obstruction. *European urology.* 2015;67(6):1099-109.
4. Mebust WK, Holtgraves HL, Cockati AT, Paters PC, Writing Committee IALIA. Transurethral prostatectomy: Immediate and postoperative complications. Cooperative study of 13 participating institutions evaluating 3,885 patients. *J Urol.* 141: 243-247, 1989. *J Urol.* 2002;167(1):5-9.
5. Kuritz RM, Lefrich K, Ahyal SA. Holmium laser enucleation of the prostate versus open prostatectomy for prostates greater than 100 grams: 5-year follow-up results of a randomized clinical trial. *Eur Urol.* 2008;53(1):100-6.
6. Cornu JN, Ahyal S, Bachmann A, de la Rosette J, Gillig P, Gratzke C, et al. A Systematic Review and Meta-analysis of Functional Outcomes and Complications Following Transurethral Procedures for Lower Urinary Tract Symptoms Resulting from Benign Prostatic Obstruction: An Update. *Eur Urol.* 2015;67(6):1068-96.
7. McVary KT, Gitelman MC, Goldberg KA, Patal K, Shore ND, Levin RM, et al. Final 5-Year Outcomes of the Multicenter Randomized Sham-Controlled Trial of a Water Vapor Thermal Therapy for Treatment of Moderate to Severe Lower Urinary Tract Symptoms Secondary to Benign Prostatic Hyperplasia. *J Urol.* 2021;205(3):715-24.
8. Chieffo E, Vecola A, De Cillis S, Piramide F, Volpi G, Amparore D, et al. New Ultra-minimally Invasive Surgical Treatment for Benign Prostatic Hyperplasia: A Systematic Review and Analysis of Comparative Outcomes. *Eur Urol Open Sci.* 2021;33:28-41.
9. Roehrborn CG, Barkin J, Gange SN, Shore ND, Gliddens JL, Bolton DM, et al. Five year results of the prospective randomized controlled prostatic urethral lift study. *Can J Urol.* 2017;24(3):802-13.
10. Sonksen J, Barber NJ, Speakman MJ, Borges R, Waltersauer U, Greene D, et al. Prospective, randomized, multinational study of prostatic urethral lift versus transurethral resection of the prostate: 12-month results from the BPH6 study. *Eur Urol.* 2015;68(4):643-52.

Updates on New Development of Medical Imaging Department

Dr Hui Ping Kuen, John
Head, Department of Medical Imaging
Union Hospital



Hello, I am Dr John Hui, the new head of the Medical Imaging Department since March 2022. It gives me great pleasure to introduce myself again to every one of you in this issue of Union Connection.

I joined the Medical Imaging Department at Union Hospital in 2013 and have worked here for nine years. Over the years, I have become deeply rooted in the Union Hospital family and am familiar with many clinicians here. Nonetheless, I am still eager to know every new face, both in my department and the hospital.

It is my honour to work with all of you, including both Union Hospital clinicians and private clinicians, and referring doctors from the Hospital Authority.

Over the past few years, even with our high manpower turnover related to the expansion of Hong Kong's radiology market, and the continuous expansion of our own services, including the opening of the Middle Road imaging centre, we are still striving to maintain service quality, provide accurate and timely reports and continue discussions with clinicians on urgent and complicated cases. I once again take this opportunity to thank all clinicians for your patience and support.

I would like to give you some information about our services.

Our Union Imaging & Healthcheck centre, opened in April 2020, is located at the H Centre, Middle Road in Tsim Sha Tsui. It is easily accessible via the MTR East TST station. The imaging centre provides an all-round service, including basic examinations like X-rays, ultrasound (USG), 2D / 3D mammography, and also more advanced imaging services like computed tomography (CT), magnetic resonance imaging (MRI), digital positron emission tomography/computed tomography (digital PET/CT), etc. These services are supported by a team of experienced radiologists and radiographers. Since its opening in 2020, we have received considerable positive feedback and support for our dedicated services and advanced imaging machines.



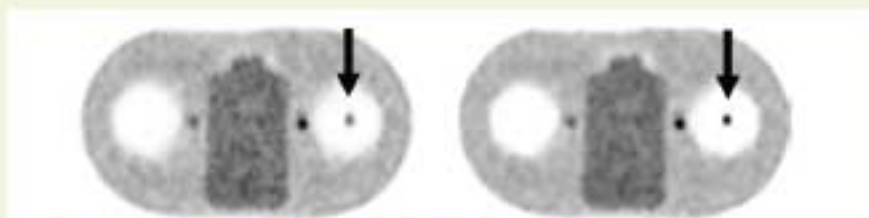
Union Imaging & Healthcheck Centre

Allow me to introduce you to one of our new imaging machines, the digital PET/CT scanner. Both the Union Imaging and Healthcheck Centre and our imaging centre at Union Hospital have installed a state-of-the-art digital PET/CT scanner, the Discovery MI, equipped with a 4-ring digital LightBurst PET detector, high definition CT scanner along with the most innovative reconstruction technology, with the combination of Time-of-Flight (TOF) and Q.Clear.



GE Discovery MI Digital PET/CT Scan (4 Rings)

The premium 4-ring digital PET detector converts received radiation information directly to image signal. It drastically increases the sensitivity of the equipment allowing the scanning time and radiation dose to be reduced, together with imaging quality improvement. Q.Clear is an innovative reconstruction algorithm which improves quantitative accuracy (SUVmean) and image quality (SNR).



Left: Image with previous generation reconstruction algorithm
Right: Image with Q.Clear. The black dot (arrow) is denser, darker and clearer.

The new generation detector and reconstruction algorithm improves the visualization of small lesions so that early cancer/abnormalities can be easily detected.

Over the next few years, we already have a packed renovation schedule for the Union Hospital Medical Imaging Department, including the upgrade to a new generation picture archiving and communication system (PACS), and the installation of new state-of-the-art USG, CT, and MRI machines. I am really excited to watch our progress.

Alongside the existing services and upcoming renovations, I would also like to take this opportunity to introduce you again to our old friend, Mr. Paul Chan, head radiographer at the New Territories East Cluster since the 1990s. After he finished his term at NTEC, Paul joined our hospital in 2016. He revamped the Medical Imaging Department and then worked on the opening of our Union Oncology Centre at Middle Road. I am pleased to work with Paul again, this time to strengthen and enhance radiology services.

As the demand for imaging services is increasing, we will continue to increase our experienced staff resources. In the coming months, you will meet more new faces, including radiologists with different sub-specialties, radiographers, nurses and secretaries. You will see our new radiologists in forthcoming issues. We hope that the collaboration with new colleagues, the existing strong team of radiologists and radiographers, and other support staff, together with encouragement from you, will help us create a new chapter for the medical imaging department.

Finally, I will take this opportunity to thank our hospital and its support in giving me this chance with this position. I will continue to work as a frontline radiologist and use my role as department head to serve patients and doctors better. I welcome any suggestions or comments you may have. I can be contacted directly.

New Clinical Sessions

Specialty Clinic – Oncology		
Booking & Enquiry: 2608 3315	Time Schedule	
Dr Lui Cheuk Yu, Louisa	Mon Wed Fri	15:00-18:00 15:00-18:00 15:00-18:00
Dr Yeung Sin Yu, Cynthia	Tue Thu Sat	09:00-12:00 09:00-12:00 09:00-10:30
Minimally Invasive Centre		
Booking & Enquiry: 2608 3383	Time Schedule	
Neurology Dr Soo Oi Yan, Yannie	Tue	14:00-17:30
Clinical Psychology Ms Lee, Mary	Mon Sat	10:00-18:00 10:00-18:00
Union Hospital Polyclinic (Ma On Shan)		
Booking & Enquiry: 2608 3377	Time Schedule	
Urology Dr Cheng Kwun Chung	Mon	10:00-12:00
Union Hospital Polyclinic (Tsim Sha Tsui)		
Booking & Enquiry: 2375 3323	Time Schedule	
Neurology Dr Soo Oi Yan, Yannie	Fri	14:30-17:30
Union Reproductive Medicine Centre (H Zentre)		
Booking & Enquiry: 3126 1623 / 2986 1133	Time Schedule	
Dr. Tung Hiu Fong	Mon Tue Thu Fri	09:00-12:00 13:00-18:00 09:00-11:00 08:00-10:00 09:00-14:00

Union Oncology Centre (H Zentre)		
Booking & Enquiry: 2159 6100	Time Schedule	
Dr Chan Man Hong, Helen	Mon Tue Wed Thu Fri Sat	14:00-17:00 09:00-17:00 09:00-17:00 09:00-13:00 09:00-17:00 09:00-12:00
Dr Chan Tak Ming, Paddy	Wed Fri	15:00-17:00 15:00-17:00
Dr Chow Lee Shu Ngar, Donna	Wed	15:00-18:00
Dr Lee Kun Min, Mimi	Tue Thu	14:00-17:00 14:00-17:00
Dr Lee Siu Hong	Wed Fri Sat	16:00-18:00 16:00-18:00 09:00-12:00
Dr Lui Cheuk Yu, Louisa	Mon Tue Wed Thu Fri Sat	09:00-13:00 09:00-17:00 09:00-13:00 09:00-17:00 09:00-13:00 09:00-12:00
Dr Wong Tze Ming	Mon Thu	09:00-11:00 16:00-17:30
Dr Yeung Sin Yu, Cynthia	Mon Tue Wed Thu Fri	09:00-17:00 14:00-17:00 09:00-17:00 14:00-17:00 09:00-17:00
Dr Yeung Wing Kay, William	Mon Tue Wed Thu Fri	09:00-13:00 09:00-13:00 09:00-13:00 09:00-13:00 09:00-13:00

New Doctors

Please extend a warm welcome to the following doctors for joining our clinical team!

		
Dr Lui Cheuk Yu Consultant in Clinical Oncology	Dr Yu Chun Hung Specialist in Radiology	Dr Wu Wing Cheung Consultant in Emergency Medicine

Regular Meeting

Mortality and Morbidity Meeting	
Date :	13 Jul 2022 (Wednesday)
Time :	8:30 a.m. – 9:30 a.m.
Co-ordinator :	Dr Kwong Kwok Hung Peter Consultant in General Surgery Union Hospital
Venue :	Training Room, 8/F MIC, Hospital Building, Union Hospital
Booking & Enquiry :	2608 3151 (Quality Assurance & Training Department)

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