

Procedure Information Sheet- Ureteroscopy (URS)

1. Introduction

1.1. Ureteroscopy (URS) is a procedure for diagnosis and treatment of pathology in ureter and renal pelvis. URS with lithotripsy is one of the treatment options for ureteric stone. The endoscope used can be rigid or flexible. X-ray may be required during procedure. Ancillary procedures including ureteric stent insertion and removal may be necessary.

2. Indication of URS

- 2.1. Urinary stone.
- 2.2. Ureteric obstruction.
- 2.3. Urothelial and ureteric lesion in upper urinary tract.

3. The procedure

3.1. The procedure may use general or monitored anaesthetic care. Doctor will then pass an endoscope into urethra, bladder and finally ureter. Access sheath may be used to put in the ureter to allow easy re-entry during the procedure. Doctor identifies the stone or target lesion. Stone will be broken by instrument. Lesion such as tumor or stricture will be dealt with accordingly. X-ray sometimes may be required to guide the endoscope. Ureteric stent and urinary catheter may be inserted as required.

4. Risk and complications

- 4.1. Haematuria.
- 4.2. Urinary tract infection.
- 4.3. Obstructive nephropathy.

5. Per-operative complications

- 5.1. Conversion to open surgery or other interventional procedures.
- 5.2. Anaesthetic complications and radiation hazard.
- 5.3. Injury to adjacent organs including perforation of ureter (1-5%) and avulsion of ureter.
- 5.4. If the ureter is too tight to pass the endoscope, a ureteric stent will be inserted to dilate the ureter and repeat the procedure in two weeks.

6. Post-operative complications

- 6.1. Haematuria and dysuria.
- 6.2. Residual stone and stone recurrence requiring repeating procedures and ancillary procedures.
- 6.3. Ureteric stricture (0.5-2%, up to 25% with stone impaction).
- 6.4. Urinary tract infection (~2-15%) and life threatening septicemia.
- 6.5. Mortality (rare).

7. Preparation before the procedure

- 7.1. Patient will be asked not to eat or drink for 6-8 hours (or instructed by Doctor) before operation.
- 7.2. Your doctor will tell you whether you should continue your regular medications during the fasting period or may give you other instructions.
- 7.3. Inform your doctor if you are pregnant.
- 7.4. Inform your doctor of any medical condition (for example diabetes, heart diseases, high blood pressure, etc.) and any medications you are currently taking.
- 7.5. Some drugs including blood thinners & aspirin may need to stop before operation.

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8. After the procedure

- 8.1. There may be bloody urine.
- 8.2. Patient will be given instruction for removal of ureteric stent if required.

9. Follow up

- 9.1. Patient will be discharged when considered appropriate for specific operations. If serious events develop after discharge, patient should contact your doctor in-charge or go to nearest Accident and Emergency Department.

10. Remarks

- 10.1. This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor

11. References

- 11.1. Hospital Authority (Smart Patient Website). Retrieved from:
<http://www21.ha.org.hk/smartpatient/SPW/en-US/Self-Care-Tips/OTP/List/?guid=3de5a30d-89a9-42c4-a1da-2a61d9aeb287>