

ANTEGRADE URETERIC STENTING

Information for patients

Introduction

- Antegrade ureteric stenting is a procedure of placing a ureteric stent via antegrade (forward) approach from the kidney. The stent usually has a pigtail loop at both ends. After optimal positioning, its proximal end is within the renal pelvis and distal end is within the urinary bladder.
- The procedure is mainly used to relieve ureteric obstruction, to divert urine flow and to relieve pressure in the management of fistula of the renal collecting system or ureter.
- Contra-indications include untreated bladder outlet obstruction, urinary tract infection and coagulation defect.
- This procedure is mainly performed by radiologists with special training in interventional radiology.

Procedure

- The preprocedure preparation of antegrade ureteric stenting is similar to that of percutaneous nephrostomy (PCN). (Please refer to “Percutaneous Nephrostomy (PCN)” leaflet)
- Percutaneous nephrostomy is performed with patient lying prone and under fluoroscopic or ultrasound guidance (Please refer to “Percutaneous Nephrostomy (PCN)” leaflet)
- The placement of ureteric stent requires fluoroscopic guidance. After insertion of the ureteric stent, a nephrostomy catheter is placed in renal pelvis.
- The procedure usually requires 1 hour.
- After the procedure, your vital signs (e.g., blood pressure and pulse rate) will be monitored. Diet can be resumed if the vital signs are stable. You are also encouraged to drink more water to keep the stent patent.
- The nephrostomy catheter will be removed in 2-3 days when the internal drainage is satisfactory.
- When your disease is cured, the ureteric stent will be removed with an endoscope introduced into the urinary bladder. Occasionally, exchange of ureteric stent is necessary when you need the stent for a long period. This is mainly performed by urologists.

Potential Complications

Apart from the complications relating to percutaneous nephrostomy (Please refer to “Percutaneous Nephrostomy (PCN)” leaflet), there are complications specific to antegrade ureteric stenting:

- Loss of stent patency from blood clot or mucosal edema: The overall stent patency is 80%, with most failure occurring within 2 months of placement.
- Perforation of the renal collecting system or ureter - uncommon.
- Bladder irritation and urinary frequency – may resolve within several days.
- Malfunction of stent due to incorrect position or failure of procedure - uncommon.
- Infection - uncommon.
- Stent migration - uncommon.
- Stent fracture - rare.
- Erosive damage to ureter or urinary bladder - rare.
- Procedure related mortality is rare.
- The overall adverse reactions related to iodine-based contrast medium is below 0.7%. The mortality due to reaction to non-ionic contrast medium is below 1 in 250000.

Disclaimer

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