PERCUTANEOUS NEPHROSTOMY (PCN)

Information for patients

Introduction

- Percutaneous nephrostomy (PCN) is an interventional procedure for external drainage of renal collecting system. It is also performed for tract creation for inserting devices, which can be used for stone removal, taking tissue for microscopic examination, dilatation of ureteric narrowing and ureteral stenting.
- This procedure is performed by radiologists with special training in interventional radiology or by urologists.
- Percutaneous nephrostomy is usually performed in the Department of Radiology under image guidance, such as X-ray and ultrasound. The procedure can also be performed in operation theatre if there are imaging facilities available.

Procedure

- The patient is lying prone or slight slanting position.
- The puncture site is at the flank region. After injection of local anaesthesia, a needle is advanced under image guidance (either X-ray or ultrasound). When the needle tip is in the collecting system, contrast medium is introduced through the needle in order to show up the collecting system.
- By means of exchange over guidewire and tract dilatation, the PCN catheter is placed and is connected to a urine bag. Patients should take care not to dislodge the drainage catheter.
- 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.
- The duration of catheter insertion depends on your clinical condition and the subsequent management of your disease.

Potential Complications

- Small amount of blood in urine: very common, but is self-limiting.
- Pain: common
- Catheter-related problems (obstruction, malposition, dislodgement): 12%
- Infectious complications: 1.4-21%
- Bleeding requiring transfusion: 2.8%
- Urine leakage outside the collecting system: less than 2%
- Massive bleeding into the collecting system requiring surgery or occlusion of the bleeding artery through catheters: 1%
- Collection of air in pleural space: 1%
- Bleeding into tissue surrounding the kidney: rare.
- Procedure related death is rare.
- The overall adverse reactions related to iodine-base 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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