

NURSING CARE OF PATIENT WITH PERCUTANEOUS NEPHROSTOMY TUBES

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January 2017

PURPOSE

- To maintain a patent catheter providing drainage of urine from the kidney when the flow of urine through a ureter is not possible or desirable and to prevent infection
- Inserted into the renal pelvis to allow drainage and relieve pressure –hydronephrosis



Indications

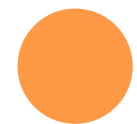
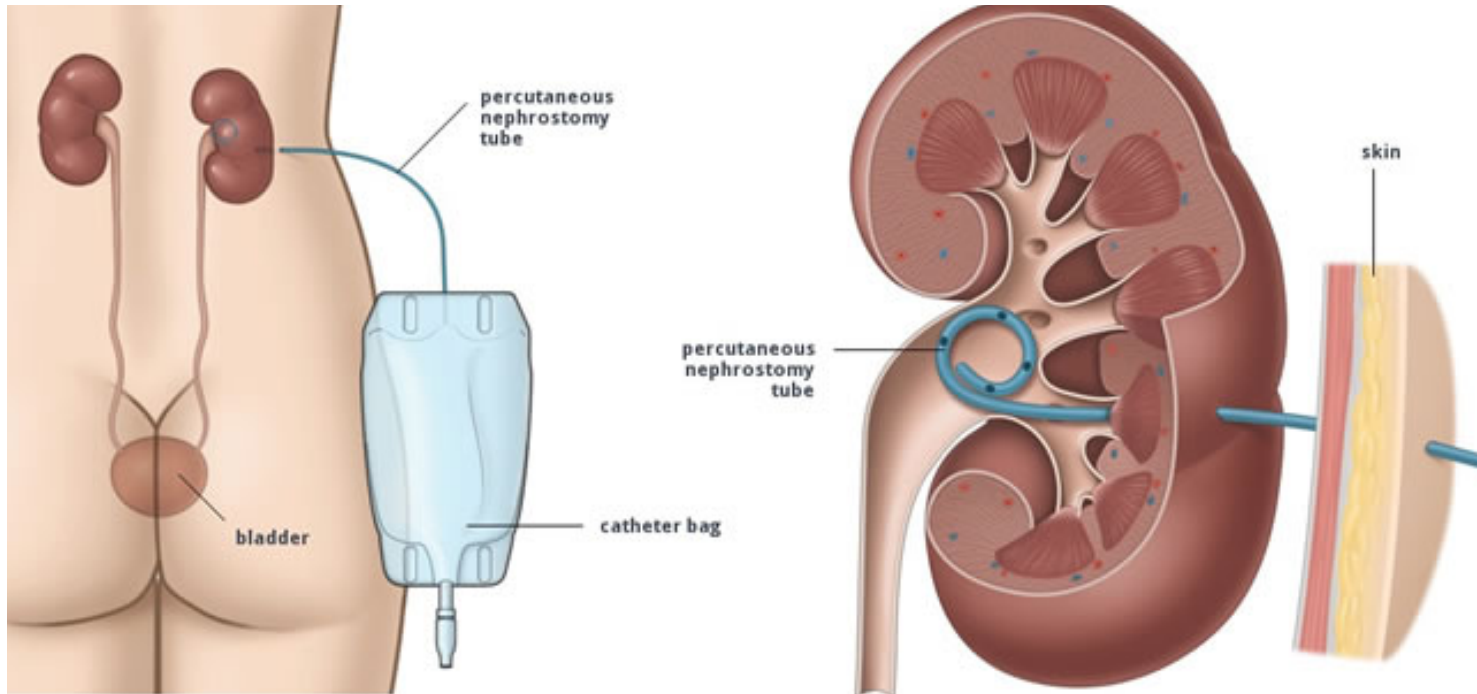
- Urinary tract obstruction
- Urinary diversion (e.g. ureteric injury; urine leak)
- Access for percutaneous procedures (e.g. stone treatment; ureteric stenting)
- Diagnostic testing (e.g. antegrade pyelography)



PRE-PROCEDURE MANAGEMENT

- Written patient consent must be obtained prior to insertion or change of tube
- Nil by mouth (as per hospital policy)
- Confirm with team the administration or withholding of anti-coagulants and other medication (as per team instructions)
- Bloods – coag, U&E
- X/Ray procedure check-list (CUH) – if in patient
- Hospital gown





POST-PROCEDURE MANAGEMENT

- Administer analgesia as prescribed
- Nephrostomy tube must be connected to a sterile closed drainage system and drainage bag should be below level of kidney at all times
- Post-procedure vital signs
- Monitor urine - out-put, colour, sediment

NOTE: normal for blood to be present in the urine immediately after nephrostomy insertion but it should decrease within 48 hours



Complications

Bleeding

Pneumothorax

Bowel injury and peritonitis

Urine leak

catheter displacement - reported at
~20% after a few months



POST-PROCEDURE MANAGEMENT –CONT'D

- Encourage patient to drink at least 2litres of water per day (unless contraindicated)
- Observe dressing and tubing for leakage
- Inspect nephrostomy to ensure it is secure and no kinking has occurred

- Common complications:
 - Infection
 - Pain
 - Dislodgement



ONGOING CARE

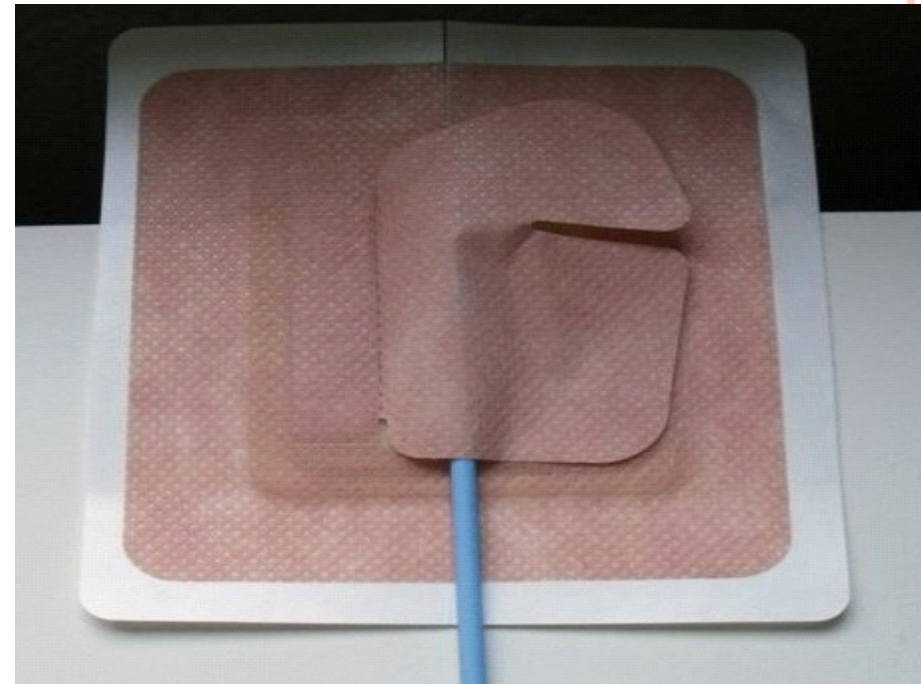
Dressing Changes:

- Secured in place with Drain-Fix dressing
- Available in two sizes



DRESSINGS CONT'D

- Dressings available from Sterile stores in CUH (as in-patient)



PROCEDURE FOR CHANGE OF DRESSING

- Should be changed weekly
- Sterile procedure
- Position: most common – side lying with nephrostomy tube facing up
- Assess skin & entry site: infection, inflammation, irritation, over –granulation
- Ensure nephrostomy in position



BAG CHANGES

- Closed drainage system
- Tru-close 600ml gravity drainage bag
- Bags available to order from sterile stores (CUH)
- Should be changed weekly
- Do not connect to night bag (connections incompatible)
- Strap can be adjusted to fit leg or waist width



PATIENT DISCHARGE

- Provide individualised education to the patient/carers, significant others
- Refer patient to public health nurse/community nursing service to maintain continuity of care
- Provide patient with extra bags and drainfix dressings prior to discharge
- Ensure patient booking for change of tube is requested or alternative plan in place (same communicated via discharge letter to community)



REFERENCES

- Nursing management of patients with nephrostomy tubes – guidelines and patient information templates. ACI Urology network
- Seitz, C., Desai, M. et al. (2012) Incidence, prevention, and management of complications following percutaneous nephrolitholapaxy. European Association of Urology, 61, pp. 146-158.

