

The Management of Percutaneous Nephrostomy Tube Problems

Local Procedure

Department / Service:	Urology
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Approved by:	Urology Directorate Division of Surgery Governance meeting
Date of approval:	7 th October 2022
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This is the most current document and should be used until a revised version is in place	
Target Organisation(s)	Worcestershire Acute Hospitals NHS Trust
Target Departments	A&E, all Wards
Target staff categories	Trust clinicians, junior doctors, nursing staff, Physician Associates

Plan Overview:

This procedure sets out the key steps necessary to deliver safe care in the management of patients who have urethral catheter or suprapubic catheter problems.

Key amendments to this Document:

Date	Amendment	By:
October 2022	New document approved	Urology Directorate, Surgery Governance

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1. INTRODUCTION

A nephrostomy is an opening between the kidney and the skin. A nephrostomy tube is a thin plastic tube that is passed from the back, through the skin and then through the kidney, to the point where the urine collects. Its job is to temporarily drain the urine that is blocked. This allows the kidney to function properly, protects it from further damage and also helps clear any infection. It is usually done under local anaesthetic with sedation. Some patients have a long-term nephrostomy tube as a form of urinary diversion long term and for others it is a temporary manoeuvre whilst they recover from urinary tract infection / sepsis and await definitive surgery to treat the cause of the ureteric obstruction.

2. DEFINITIONS AND/OR ABBREVIATIONS

Trust	Worcestershire Acute Hospitals NHS Trust
Staff	All employees of the Trust including those managed by a third party on behalf of the Trust
Invasive procedure	A procedure that has the potential to be associated with a Never Event if safety standards are not set and followed
NatSSIPs	National Safety Standards for Invasive Procedures
LocSSIPs	Local Safety Standards for Invasive Procedures
WHO	World Health Organisation
NPSA	National Patient Safety Agency
ICE	Integrated Clinical Environment – web-base request system used in the Trust
NOAC	Novel Oral Anti-Coagulants
LMWH	Low molecular weight heparin

3. Nephrostomy problems presentation

Patients discharged home with a nephrostomy tube in place can develop certain problems prompting emergency admission to urology as outlined below:

- 1) Nephrostomy not draining / leaking urine around nephrostomy
- 2) Nephrostomy fallen out

3.1 General baseline investigation

- Standard observations/NEWS2 score.
- Urinalysis - MSU / Nephrostomy specimen of urine for C & S (if possible).
- Bloods - U+E's, FBC, CRP, urate, calcium and clotting screen (clotting is mandatory for patients requiring replacement nephrostomy).

- Blood cultures if the patient is pyrexial $>38^{\circ}\text{C}$, has signs of systemic inflammatory response syndrome or sepsis. If this is the case activate SEPSIS 6.
- A plain X-Ray KUB should be performed to check tube position.

3.2 Specific Management

Nephrostomy tube not draining / leaking urine alongside:

- 1) Check if kink in nephrostomy tube (if severe may need replacing).
- 2) Try flushing with 10mls of saline via nephrostomy tube.
- 3) Arrange X Ray KUB to check tube position and urine / blood tests as above.
- 4) If unable to flush / establish drainage request a nephrostogram +/- tube replacement on ICE and discuss with the interventional radiology on the telephone or face-to-face in Fluoroscopy Room Alexandra Hospital.

Nephrostomy tube has fallen out:

- 1) Request nephrostomy tube replacement on ICE and discuss with IR team on the telephone.
- 2) Urine and blood tests as above.
- 3) If patient has developed infection:
 - Oral antibiotics if no systemic features of infection.
 - If systemically unwell or signs of sepsis, follow SEPSIS 6 and administer intravenous antibiotics according to Trust guidelines.
- 4) Intravenous fluids until patient improving and taking a sufficient oral intake.
- 5) Analgesia and/or antiemetic as required, regular IV Paracetamol, supplemented with an oral opiate or parenteral if vomiting.

3.3 Follow up:

- In patients with long term nephrostomy ensure that date for next exchange of nephrostomy tube has been requested with the interventional radiology unit prior to discharge.
- In patients with a nephrostomy tube who are awaiting ureteric stone surgery please inform senior stone surgeon/host Consultant of this emergency admission as this may influence scheduled elective surgery date.

4 Implementation

4.1 Plan for implementation

As soon as approved at Directorate meeting

4.2 Dissemination

Trustwide

4.3 Training and awareness

Human Factors Training offered by Worcestershire Acute Hospitals NHS Trust

5. Monitoring and compliance

The NHSLA requirements are –

Organisations should measure, monitor and evaluate compliance with the minimum requirement within the NHSLA Risk Management Standards. This should include the use of audits and data related to the minimum requirements. The organisation should define the frequency and detail of the measurement, monitoring and evaluation processes.

Monitoring demonstrates whether or not the process for managing risk, as described in the approved documentation, is working across the entire organisation. Where failings have been identified, action plans must have been drawn up and changes made to reduce the risks.

Monitoring is normally proactive - designed to highlight issues before an incident occurs – and should consider both positive and negative aspects of a process. The table below should help to detail the 'Who, What, Where and How' for the monitoring of this Policy.

Procedure

Monitoring Tool

This should include realistic goals, timeframes and measurable outcomes.

How will monitoring be carried out?

Who will monitor compliance with the guideline?

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: <i>(Responsible for also ensuring actions are developed to address any areas of non-compliance)</i>	Frequency of reporting:
	WHAT?	HOW?	WHEN?	WHO?	WHERE?	WHEN?
	These are the 'key' parts of the process that we are relying on to manage risk. We may not be able to monitor every part of the process, but we MUST monitor the key elements, otherwise we won't know whether we are keeping patients, visitors and/or staff safe.	What are we going to do to make sure the key parts of the process we have identified are being followed? (Some techniques to consider are; audits, spot-checks, analysis of incident trends, monitoring of attendance at training.)	Be realistic. Set achievable frequencies. Use terms such as '10 times a year' instead of 'monthly'.	Who is responsible for the check? Is it listed in the 'duties' section of the policy? Is it in the job description?	Who will receive the monitoring results? Where this is a committee the committee's specific responsibility for monitoring the process must be described within its terms of reference.	Use terms such as '10 times a year' instead of 'monthly'.
Pg 4-5	Compliance to Clinician Team responsibilities for pre-procedure and post-procedure follow up.	DATIX records of non-compliance	Yearly	Urology/Radiology Governance Leads	Directorate Manager	Yearly

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Contribution List

This key document has been circulated to the following individuals for consultation;

Designation

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Urology Directorate meeting
Radiology Directorate meeting
Surgical Division Governance meeting

Supporting Document 1 - Equality Impact Assessment Tool

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

		Yes/No	Comments
1.	Does the policy/guidance affect one group less or more favourably than another on the basis of:		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
2.	Is there any evidence that some groups are affected differently?	No	
3.	If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?	No	
4.	Is the impact of the policy/guidance likely to be negative?	No	
5.	If so can the impact be avoided?	N/a	
6.	What alternatives are there to achieving the policy/guidance without the impact?	N/a	
7.	Can we reduce the impact by taking different action?	N/a	

If you have identified a potential discriminatory impact of this key document, please refer it to Assistant Manager of Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact Assistant Manager of Human Resources.

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	

If the response to any of the above is yes, please complete a business case which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval