

Pre-Operative Urine Testing In Patients Undergoing Urological Surgery at RCHT Standard Operating Procedure

V1.0

February 2023

Table of Contents

1. Introduction	3
2. Purpose of this Standard Operating Procedure	3
3. Ownership and Responsibilities	3
3.1. Role of the Managers	3
3.2. Role of Individual Staff	3
4. Standards and Practice	3
5. Dissemination and Implementation	4
6. Monitoring compliance and effectiveness	4
7. Updating and Review	5
8. Equality and Diversity	5
Appendix 1. Governance Information	6
Appendix 2. Equality Impact Assessment	8

Data Protection Act 2018 (General Data Protection Regulation – GDPR) Legislation

The Trust has a duty under the Data Protection Act 2018 and General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team

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1. Introduction

There is evidence that pre-operative positive urine cultures increase the risk of post-operative morbidity in patients undergoing surgery to the urinary tract. However, other than in upper tract stone surgery (Ureteroscopy / PCNL), there is no good evidence to suggest whether pre-operative treatment with antibiotics is superior to 'on the day of surgery' antibiotics.

2. Purpose of this Standard Operating Procedure

- 2.1. This Standard Operating Procedure is to act as a guide on pre-operative urine testing for patients undergoing urological surgery that involves the urinary tract.
- 2.2. To ensure all relevant patients have the correct urine tests and guide those responsible for the patients in dealing appropriately with the results, to reduce the risk of intra-operative infections/sepsis, as well as reduce the chance of cancellations on the day of surgery.

3. Ownership and Responsibilities

This Standard Operating Procedure has been written by Mathew Hotston, Governance Lead for Urology. It has been presented and discussed at departmental governance meeting and agreed by all Urology Consultants.

3.1. Role of the Managers

Line managers are responsible for:

- Ensuring that there is staff in place to ensure all relevant patients undergo a pre-operative Mid Stream Urine (MSU).

3.2. Role of Individual Staff

All staff members are responsible for:

- Checking the MSU results and acting upon them, using this SOP as a guide to aid their decision making.

4. Standards and Practice

- 4.1. **All** patients that are due a procedure in theatre that involves the urinary tract should have a pre-operative MSU, and a urine dipstick on the day of surgery. This therefore excludes inguino-scrotal surgery (eg hydrocoele repair, orchidectomy, orchidopexy, vasectomy, excision of epididymal cyst).
- 4.2. **All** patients undergoing surgery involving the urinary tract should be offered antibiotics to be given at the time of surgery.
- 4.3. **All** patients should also receive notification in their TCI letter that a **urine sample is required 7-10 days prior to their procedure.**
- 4.4. Any recent MSUs should be reviewed by the operating surgeon.

4.5. Standard induction antibiotics to be used at RCHT are:

- Gentamicin 3mg/kg for lower urinary tract / uncatheterised patients
- Gentamicin + amoxycillin for upper tract surgery / catheterised patients.

(Unless pre-op MSU demonstrates resistance to these antibiotics; then tailor the antibiotic to their sensitivities)

4.5. For positive pre-operative MSU's:

- 4.5.1. All patients undergoing **upper tract surgery** (eg ureteroscopy /PCNL) should be treated with a course of antibiotics prior to surgery, and should not be considered for surgery if untreated / still nitrate +ve of the day of surgery.
- 4.5.2. Any positive MSUs/ positive nitrate results should be passed on to the patient's named consultant, or the surgeon that will operating on them. The context of the patient should be taken into account, including comorbidities, immune status, catheterised vs non catheterised, symptomatic status.
- 4.5.2.1. **Catheterised patients:** suggest pre-operative course of antibiotics (minimum 3 days). If nitrate positive on day of surgery: if well/asymptomatic/no other risk factors for sepsis- continue with procedure.
- 4.5.2.2. **Uncatheterised patients:** consider antibiotic course prior to surgery (minimum 3 days), postpone if untreated. If nitrate positive on day of surgery: operating surgeon's decision whether to proceed.

5. Dissemination and Implementation

- 5.1. This document will be sent to all urology consultants and middle grades and be available on the urology clinical shelf on the intranet.
- 5.2. It will also be sent to line managers / those responsible for booking patients and organising pre-operative MSU's.

6. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	Pre-operative MSU testing for urology patients undergoing surgery involving the urinary tract.
Lead	Mathew Hotston

Information Category	Detail of process and methodology for monitoring compliance
Tool	Perform a snapshot check of patients undergoing surgery, checking MSU's performed pre-operatively, checked and managed pre-operatively, and review on the day surgery cancellations due to untreated MSU's.
Frequency	Quarterly
Reporting arrangements	Report to urology clinical governance
Acting on recommendations and Lead(s)	Discussed at clinical governance, and line managers, governance lead, clinical lead will act on recommendations.
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned following discussion at governance. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant clinical and admin staff within urology.

7. Updating and Review

This SOP is to be review every 3 years; the next review will be February 2026.

8. Equality and Diversity

8.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the '[Equality, Inclusion and Human Rights Policy](#)' or the [Equality and Diversity website](#).

8.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Pre-Operative Urine Testing In Patients Undergoing Urological Surgery at RCHT Standard Operating Procedure V1.0
This document replaces (exact title of previous version):	New Document
Date Issued/Approved:	December 2023
Date Valid From:	February 2023
Date Valid To:	February 2026
Directorate / Department responsible (author/owner):	Mathew Hotston, Consultant Urologist
Contact details:	01872 253069
Brief summary of contents:	SOP for organising and managing pre-operative MSU tests for patients undergoing urological surgery
Suggested Keywords:	Urology, MSU, pre-operative
Target Audience:	RCHT: Yes CFT: No CIOB ICB: No
Executive Director responsible for Policy:	Chief Medical Officer
Approval route for consultation and ratification:	Urology Speciality Governance Meeting
General Manager confirming approval processes:	Ian McGowan
Name of Governance Lead confirming approval by specialty and care group management meetings:	Suzanne Atkinson
Links to key external standards:	None required
Related Documents:	None required
Training Need Identified?	No

Information Category	Detailed Information
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet
Document Library Folder/Sub Folder:	Clinical / Urology

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
December 2022	V1.0	Initial issue	Mathew Hotston, Consultant Urologist

All or part of this document can be released under the Freedom of Information Act 2000

This document is to be retained for 10 years from the date of expiry.

This document is only valid on the day of printing

Controlled Document

This document has been created following the Royal Cornwall Hospitals NHS Trust Policy for the Development and Management of Knowledge, Procedural and Web Documents (The Policy on Policies). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity and Inclusion Team
rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy / policy / proposal / service function to be assessed:	Pre-Operative Urine Testing In Patients Undergoing Urological Surgery at RCHT Standard Operating Procedure V1.0
Directorate and service area:	General Surgery and Cancer Services
Is this a new or existing Policy?	New
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Mathew Hotston, Consultant Urologist
Contact details:	01872 253069

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	Urology consultants and middle grades, urology bookers, line managers.
2. Policy Objectives	Ensure patients undergoing surgery involving urinary tract have pre-operative MSUs, which are checked and acted upon appropriately.
3. Policy Intended Outcomes	Reduce number of on day surgery cancellations
4. How will you measure each outcome?	Audit
5. Who is intended to benefit from the policy?	Urology patients, bookers, urology consultants

Information Category	Detailed Information
6a. Who did you consult with? (Please select Yes or No for each category)	<ul style="list-style-type: none"> Workforce: Yes Patients/ visitors: No Local groups/ system partners: No External organisations: No Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	Please record specific names of individuals/ groups: All those attending urology governance meetings
6c. What was the outcome of the consultation?	In agreement
6d. Have you used any of the following to assist your assessment?	National or local statistics, audits, activity reports, process maps, complaints, staff or patient surveys: No

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	
Religion or belief	No	
Marriage and civil partnership	No	

Protected Characteristic	(Yes or No)	Rationale
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment:

Mathew Hotston

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:

[Section 2. Full Equality Analysis](#)