GMCA GREATER MANCHESTER COMBINED AUTHORITY

NHS in Greater Manchester

Greater Manchester Cancer

Clinical Pathway Boards

**STANDARD OPERATING PROCEDURE (SOP) FOR**

**TRANSPERINEAL ULTRASOUND GUIDED BIOPSY OF PROSTATE (TBP)**

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| Procedure reference: | | Version: | DRAFT |
| Document owner: | Mr J Cherian | Accountable committee: | Urology Pathway Board |
| Date approved: | 15/1/19 | Date ratified: | 15/1/19 |
| Review date: | 15/1/21 | | |
| Parent policy | | | |
| Other associated policies | NICE Guidelines [*https://www.nice.org.uk/guidance/ipg364*] | | |
| Target audience: | All clinical staff | | |

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| **STATEMENT OF INTENT** | |
| **PURPOSE OF SOP** | This standard operating procedure (SOP) has been developed to standardise and achieve best practice for delivering Transperineal Prostate Biopsy (TPB) and to minimise risks and maintain patient safety and comfort.<br><br>TPB is an invasive diagnostic procedure used if there is suspicion of prostate cancer (based on abnormal PSA or DRE) or occasionally in patients with known low-risk prostate cancer as a part of an active surveillance (AS) protocol. |
| **SCOPE** | All clinical personnel involved including<br><br>1. All referring urologists<br>2. Urologists / interventional radiologist performing the procedure<br>3. Day service unit staff caring for patients pre and post procedure |
| **AUTHORISED PERSONNEL / TRAINING REQUIRED** | TPB should be performed by appropriately trained / mentored staff e.g Urologists, radiologists, health care professionals (CNS/ANP etc.).<br><br>All personnel performing TPB are expected to regularly audit and review clinical outcomes of all patients undergoing the procedure |
| **REFERENCES**<br><br>*(if applicable)* | *https://www.nice.org.uk/guidance/cg175*<br><br>*https://www.nice.org.uk/guidance/ipg364*<br><br>*https://www.nice.org.uk/guidance/ipg364/informationforpublic*<br><br>*https://www.nice.org.uk/guidance/ipg364/resources*<br><br>*https://www.baus.org.uk/_userfiles/pages/files/Patients/Leaflets/Transperineal%20biopsies.pdf* |

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| **Clinical indications** | 1. In the evaluation of men with suspected prostate cancer<br>a. Anterior / apical lesion identified on MR scan, not accessible for biopsy via trans-rectal route<br>b. Rising PSA, previous negative biopsies. In the absence of any specific MR identified targetable lesion, TPB is preferred to trans-rectal saturation biopsy for detection of prostate cancer<br>c. Patients with no rectal access for prostate biopsy – transperineal biopsies can be performed by using the abdominal probe on the perineum<br>2. In the follow up of patients diagnosed with localised low risk prostate cancer on active surveillance<br>a. Anterior / apical lesion identified on MR scan, not accessible for biopsy via trans-rectal route<br>b. TPB mapping can help in reducing the number of biopsies during follow up<br>3. As an alternative to TRUS biopsy in men with high risk of sepsis |
| **Responsibilities** | **<u>Referring clinician</u>**<br>a. To discuss with patients what the procedure involves, the risks and benefits of the procedure and what alternatives are available.<br>b. Ensure proper documentation of discussion with patient and provide relevant information leaflet for the procedure +/- consent.<br>c. To discuss with patients the risks and benefits associated with discontinuation of anticoagulant / antiplatelets agents and ensure that such agents are discontinued for an appropriate period of time prior to the procedure. |

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| | **<u>Admitting day-case unit nursing staff.</u>**<br><br>a. Perform ward test of urine (Dipstick) examination and document the results<br><br>b. Undertake and document pre procedure observations.<br><br>c. To go through the TBP care pathway check list and ensure there is no contraindication to this procedure.<br><br>d. Administer antibiotics as per local trust policy<br><br>**<u>Clinician performing biopsy</u>**<br><br>a. Review patient records and relevant radiology images to ensure procedure is still appropriate.<br><br>b. Explain procedure / complications to patient and obtain written consent.<br><br>c. Ensure appropriate antibiotics are prescribed as per local trust policy. Oral antibiotics if used should be given 1 hour prior to procedure.<br><br>d. Ensure antiplatelet / anticoagulant medications has been discontinued for appropriate duration prior to procedure. It is not recommended to discontinue low dose Aspirin routinely before TBP.<br><br>e. Peri-operative Alpha-blockers are recommended and should be administered as per local trust policy. |
| **Procedure** | **Location**<br><br>TBP is performed in a suitable operating theatre setting where resuscitation equipment is readily available (oxygen, arrest trolley, defibrillator, emergency drug pack and monitoring equipment).<br><br>Anaesthesia<br><br>TBP is routinely performed under General / Regional anaesthesia but can also |

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| | be performed under local anaesthesia by suitably trained and experienced personnel.<br><br>The operator is a Urologist / radiologist / HCP with the appropriate knowledge, skills and training. Trainees can perform the procedure under the direct supervision of a competent operator.<br><br>**Position**<br><br>Patients are put in exaggerated lithotomy position ensuring that all the pressure points are adequately padded and supported.<br><br>Recording three dimensional prostate volume and PSA density is recommended though not mandatory, as this information might be available on the MRI scan report.<br><br>Urethral catheter should be considered prior to starting biopsy, especially for patients requiring peri-urethral biopsies. If a catheter is inserted, then it should be removed at the end of procedure.<br><br>**Number of biopsy cores**<br><br>Biopsies should be taken to target all relevant zones of the prostate. Separate biopsies are recommended from the anterior and posterior half of the prostate, the number of biopsies from each zone dependant on the size of the gland. Further targeted biopsies from MR scan identified lesions are also recommended.<br><br>Biopsy cores obtained from each of the above 'zones' of the prostate are placed in separate containers and labelled accordingly; for e.g.: Right anterior, Right posterior medial etc.<br><br>Systematic template-based mapping biopsies taken from the 24 zones of prostate as described by Barzell and Whitmore is not routinely recommended, unless done for the purpose of tumour localisation to aid focal therapy.<br><br>Consider local anaesthetic infiltration or local application at the end of the procedure to minimise post-operative pain. |

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| **Post-operative care** | Urethral catheter if used, should be removed at the end of procedure or in the recovery room. If there is significant haematuria, consider leaving the catheter in-situ and arrange a TWOC in 5-7 days.<br><br>Patients have routine post-operative care and discharged home once voiding satisfactorily. If the patient develops retention, he should be re-catheterised and arrange TWOC in 5-7 days.<br><br>Ensure patients are discharged home with alpha-blockers and antibiotics if appropriate, as per local trust policy. |

**VERSION CONTROL SHEET** *Insert version number and any minor amendments in this section*

| Version | Date | Author | Status | Comment |
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| DRAFT | 12/11/18 | Mr J Cherian | Created | |
| DRAFT | 15/11/18 | Mr J Cherian | Comments | Urology Pathway Board |
| FINAL | 15/1/19 | Mr J Cherian | Validated | Approved and validated by Pathway Board |
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