



# Transrectal Ultrasound (TRUS) Guided **Biopsy of Prostate**

# **Procedure Information Sheet**

#### Introduction

Prostate is an accessory gland of the male reproductive system. It is situated around the bladder neck, with the urethra passing through it and near the rectum. Transrectal ultrasound study is useful to evaluate the prostate and to guide tissue biopsy if there is clinical suspicion (e.g. raised PSA level) for any pathological changes.

### The Operation / Procedure

- 1. Please follow the doctor's instruction to maintain the body position.
- 2. You will lie on a left lateral position with your knees bending upwards.
- 3. The doctor will gently insert the lubricated ultrasound probe into your rectum.
- The probe emits sound waves and reflecting your prostate image on the video screen, the doctor evaluates the size and appearance of your prostate.
- A biopsy needle can be inserted through the rectum via the needle guide on ultrasound probe into your prostate to take the tissue sample after ultrasound imaging.
- During the biopsy, six or more samples of tissue are usually obtained for histopathology.

### **Before the Operation / Procedure**

- Inform doctor of any medical condition, for example diabetes, heart diseases, high blood pressure etc) and any medications you are currently taking. (for example aspirin or blood thinner, may need to stop for a period before operation)
- 2. Discuss with doctor in charge about the operation management, nature of operation and possible risks. Read through and understood this information sheet and complete the consent form.
- Check clotting profile for any bleeding tendency, to be corrected if abnormality detected.
- 4. If you are taking oral anti-coagulant e.g. Aspirin, please ask the doctor when it needs to be discontinued.
- 5. Oral antibiotics will be given to the patient before and after the biopsy to prevent infection.
- 6. You need to clear your rectum with the prescribed fleet enema in the morning before the procedure.
- 7. Sedative or analgesic will be prescribed by the doctor.
- Change to operation gown, socks and cap, remove underwear, denture, contact lens and jewellery (including hair pins, ear rings and ring etc.).
- Empty bladder before transfer to Operating Theater.

### After the Operation / Procedure

- 1. Patient may notice rectal bleeding, blood in urine for a couple of days or some blood in semen for 2-3 weeks. Encourage fluid intake will help urine drainage. If rectal bleeding is increased / patient has fever, please inform you doctor directly.
- 2. According to doctor's prescription to complete a course of antibiotics.
- 3. If patient is taking oral anti-coagulant e.g. Aspirin, please ask the doctor when it needs to be restarted.
- Resume diet and exercise as before.

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Patient's Label	
Patient Name: _	
Hospital No:	
Episode No:	
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## **Risk and Complication**

- Minor complications are frequent (range 60-79%) and major complications are rare (range0.4-4.3%). The need for hospitalization is less than 4%. Severe bleeding that requires intervention is rare.
- Bleeding complications are the most common complications and include:
  - Hematuria (blood in the urine): very common (more than 50%) and usually mild. It may persist for 3-7 days after the procedure and even longer in some patients.
  - 2.2 Hematospermia (blood in the semen): common(average~30%) and can persist up to a month.
  - Hematochezia (rectal bleeding): less common (less than 10%) and is usually quickly resolved.
- 3. Infectious complications may occur in a small proportion of patients despite antibiotic prophylaxis, and are potentially the most serious complications such as septicemia.
- Symptoms and signs of infection include:
  - 4.1 Fever
  - 4.2 Chills
  - Dysuria (pain with urination) 4.3
  - Other general signs of infection
  - Positive cultures of bacteria in urine or blood
- 5. Other complications include vague pelvic discomfort or pain, vasovagal episodes (feeling dizzy) in related to pain, difficulty in voiding and urinary retention.
- Early recognition and intervention is important to avoid severe consequences. If worrisome symptoms occur, they should be reported to a doctor promptly.
- Unfortunately, biopsy of the prostate is not completely accurate, and a proportion (up to a fifth) of small tumors can be missed. If the biopsy is negative and the clinical suspicion is still high, a further biopsy may be needed on another day.

## **Disclaimer**

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

#### Reference

Hospital Authority Coordinating Committee in Surgery: Transrectal Ultrasound (TRUS) Guided Biopsy of Prostate (2020)

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		Patient's Label Patient Name: Hospital No: Episode No:	
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