



## Procedure Information

### Transperineal Ultrasound Guided Prostate Needle Biopsy

#### Introduction

The prostate is located at the base of the urinary bladder and in front of rectum. Ultrasound guided prostate biopsy is a procedure to sample prostate gland being considered at high risk for harboring prostatic cancer on the basis of clinical diagnosis or digital rectal examination (DRE) or by serum prostate-specific antigen (PSA) elevation. Prostate biopsy can be performed via transperineal route. The procedure can be guided by transrectal ultrasound alone or fusion with the MRI images.

#### Outcomes

Prostate biopsy is a diagnostic procedure to determine the nature of prostate pathology (prostate cancer).

#### Procedures

1. The procedure can be performed with local anaesthesia, intravenous sedation, monitored anaesthesia care or general anaesthesia.
2. The procedure would be performed in lithotomy position.
3. The ultrasound probe (transducer) is lubricated and then placed into the rectum. Real-time images are produced from different angles which visualize the prostate features such as size, shape and structure.
4. A biopsy needle will be passed through perineal area to sample tissues in the prostate gland for laboratory testing.
5. The number of tissue cores prostate biopsy varies according to biopsy template.

\*The biopsy procedure itself takes about 20-60 minutes.

#### Possible Risks and Complications

1. Blood-stained urine (may persist for 14 days)
2. Blood-stained semen (may persist for 6 weeks)
3. Mild perineal bruising or swelling
4. Painful urination/ voiding difficulty/ urinary retention (failed to pass urine) (5%)
5. Urinary tract infection (1%)
6. Life-threatening sepsis (<1%)
7. Short-term erectile dysfunction (5%)
8. Bleeding from rectum
9. False-negative results

\*\* The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all operations are carried out with utmost professionalism and care this does not rule out the possibility of complications arising. In the event of peripheral organ damage or post-operative haemorrhage or leakage, further operations may be required.

## **Pre-procedure Preparations**

1. Good hygiene can prevent infection.
2. The procedure and possible complications will be explained by the doctor and a consent form must be signed prior to the procedure.
3. Please inform the doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia.
4. Please inform doctor if you are taking medications that affect blood coagulation, such as Aspirin, Warfarin, Xarelto or Pradaxa and Chinese medication. We also recommend that medications affect blood coagulation should be discontinued prior to the scheduled prostate needle biopsy with doctor's advice. Please discuss with your doctor during the consultation.
5. A course of prescribed antibiotics must be completed before the procedure.
6. Please inform the doctor if experiencing pain with urination, turbid urine, fever or other urinary infection symptoms.
7. No food or drink six hours before the procedure. (Applicable for intravenous sedation or monitored anaesthesia care)
8. Please change into a surgical gown after removing all belongings including undergarments, dentures, jewellery and contact lenses.
9. Please empty your bladder before the procedure.

## **Advices on Discharge**

1. Please complete the course of antibiotics as prescribed by the doctor.
2. Heavy physical activities should be avoided for 24 to 48 hours after the procedure.
3. You may experience the following symptoms after the procedure:
  - 3.1 Mild pain
  - 3.2 Difficulty with urination
  - 3.3 Infection
    - It may typically occur within the first 24 - 48 hours.
    - Symptoms of chills, rigor or high fever over 38°C.
    - Immediately return to the Minimally Invasive Centre or Emergency Medicine Centre for professional attention in the event of the above symptoms.
  - 3.4 Bleeding
    - Urine: little blood in urine for a few days. An increase in water consumption will help with urination.
    - Semen: little blood in semen for a couple of weeks to months.
    - Rectum: light bleeding for a couple of days.
4. Please consult the doctor before resuming pre-procedure medications, e.g. aspirin or warfarin.
5. A normal diet may be resumed.
6. Immediately consult your doctor or return to hospital for professional attention in the event of difficulty in passing urine, massive bleeding, shivering, high fever over 38°C or 100°F, or any other unusual symptoms etc.
7. The biopsy results usually take about a week.
8. Any follow-up consultations should be attended as scheduled.

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

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Compiled by Union Hospital Operating Theatre (OT) Governance Committee

The above information is for reference only, please enquire your physician for details  
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