

Coordinating Committee in Surgery

# <u>Transperineal Ultrasound-guided Prostate Needle Biopsy</u> 經會陰超聲波掃描前列腺穿刺活組織檢查

# Introduction

When there is clinical suspicion of prostate cancer, the doctor may suggest a transperineal ultrasound-guided prostate needle biopsy for the patient. It is an invasive procedure to diagnose prostate cancer. However, the possibility of prostate cancer cannot be completely ruled out by a negative result.

# Indications

- 1. Clinical suspicious of prostate cancer
- 2. Digital rectal examination shows prostate nodule
- 3. Elevated serum prostate specific antigen (PSA) level
- 4. Re-staging of a known prostate cancer

## The procedure

Before the transperineal ultrasound-guided prostate needle biopsy, the patient may be given medication to clear the rectum and/or antibiotic prophylaxis. The procedure may be performed under local anaesthesia, sedation or spinal/general anaesthesia. After placing the ultrasound probe into the rectum, the doctor obtains multiple biopsies from the prostate through the perineum. The whole procedure takes about 30 to 45 minutes.

## **Possible Complications**

- 1. Life-threatening sepsis (0.1%)
- 2. Urinary tract infection (1%)
- 3. Haematuria (may last for 10 days)
- 4. Haematospermia (may last for 6 weeks)
- 5. Voiding difficulty / urinary retention (5%)
- 6. Mild perineal bruising or swelling (10%)
- 7. Short-term erectile dysfunction (5%)

## Precautions

Inform the doctor if you are taking medications that affect blood clotting, such as Warfarin or Aspirin, as these drugs may need to be stopped few days before the procedure. If there are symptoms of urinary tract infection such as fever or dysuria

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before the examination, please report the symptoms to the doctor.

#### After the procedure

Patient can be discharged on the same day if stable and may be given medications as required clinically. Drink more water if there is no contraindication. Haematuria and haematospermia may occur as charted above. If severe bleeding, fever or other symptoms occurs, consult your doctor or visit the emergency department nearby.

#### Follow up

The patient will be given a follow-up date to review the pathology of prostate biopsies.

#### Remarks

This is general information only, and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information, please contact your doctor.