



Ultrasound Imaging Of The Prostate



What is an Ultrasound scan?

Ultrasound scan (US) is a non-invasive diagnostic technique which uses high-frequency sound waves to capture images inside the body. The sound waves are recorded and displayed as a real-time visual image. No ionizing radiation is involved in ultrasound scan.

What are the common types of Ultrasound scan?

US is widely used for “seeing” many of the body’s internal organs including heart, liver, gallbladder, breasts, etc.

In men, the prostate gland and seminal vesicles can be examined.

How is Prostate Ultrasound performed?

There are two methods of performing a prostate ultrasound examination:

- Transabdominal scan
- Transrectal scan

This examination is performed by a specially trained healthcare professional (Radiographer or Sonographer) or by a doctor.

TRANSABDOMINAL SCAN

How do I prepare for the procedure?

An adequately filled urinary bladder is required as this acts as a window to visualize the prostate. Without the window, visualization is affected and the organ cannot be properly seen.

At the same time, a bladder that is too full will tend to compress on the prostate and its surrounding organs, again resulting in an inaccurate picture.

Usually drinking 4-5 glasses of water and waiting for about 20-30 minutes will be adequate for an appropriate window to be formed. However, as each of our body system is slightly different it may take a longer or shorter time to form this window adequately. Some patients may also need to take more water than others.

Let us know, when you feel there is a need to empty your bladder and the radiographer will do a check. If it is adequate, the examination may proceed. If not, you will be advised accordingly.

Infrequently, the bladder may be over-filled, in this case, you will be advised to empty your bladder partially.

Do not empty your bladder until the procedure is completed and images are checked.

How is the procedure performed?

- You will be asked to lie on the examination table.
- A water soluble gel is applied over the lower abdomen. In order not to wet your garments you may be requested to remove them. In any case, the gel is water soluble and can easily be removed during routine laundry and will not stain your clothes.
- The probe will be pressed firmly against your body and moved until the desired images are captured.
- There may be varying degrees of discomfort due to the pressure as the transducer is moved over your abdomen, especially when you have a full bladder.
- Once most of the images are taken, you will be asked to empty your bladder and additional images taken after it is emptied.
- Please allow some time for the images to be checked.

The scanning examination is usually completed within half an hour.

ADVANTAGE OF TRANSABDOMINAL SCAN

- Broad view of the prostate area.

LIMITATION OF TRANSABDOMINAL SCAN

- Ultrasound waves are reflected by air or gas in the bowels and may prevent visualization of prostate and the surrounding area.

TRANSRECTAL SCAN

How do I prepare for the procedure?

- No special preparation is required.
- You may be required to empty your bladder prior to the scan.

How is the procedure performed?

- You will be asked to lie on your left side, with your knees bent up slightly.
- You may be asked to remove your lower clothings.
- Specially designed probe with protective covering is lubricated with gel.
- It is inserted into the rectum.
- Most of the time, it should not be painful, but there may be some discomfort as the images are obtained from different angles to get the best view of the prostate.

- If a biopsy is required, a needle is advanced into the prostate gland while the doctor guides the needle placement with ultrasound. A small amount of tissue is taken for microscopic examination.

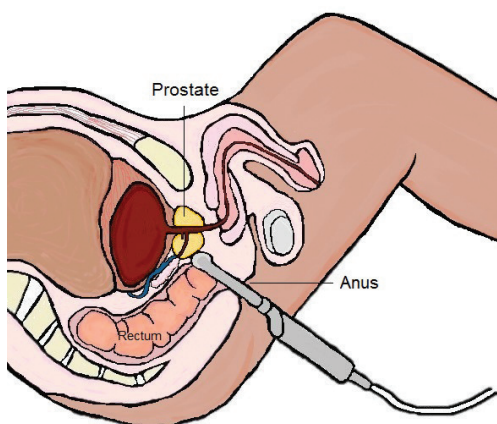
The scanning examination is usually completed within half an hour.

ADVANTAGE OF TRANSRECTAL SCAN

- Gives better visualization of the prostate.
- Does not require a full urinary bladder.

LIMITATION OF TRANSRECTAL SCAN

- Men who have had the tail end of their bowel (rectum) removed during prior surgery are not good candidates as this type of scan requires placing a probe into the rectum.



What kind of scan should I have?

Your doctor will suggest what is the most suitable for you in your circumstance.

Is there any risk involved?

For standard diagnostic ultrasound there are no known harmful effects on humans.

I confirm that I understand the information herein about Ultrasound Prostate as it has been read by me and/or explained to me.

Name : _____

Passport/NRIC No.: _____

Signature: _____

Date: _____

Confirmation given before (staff's name): _____

Staff's signature: _____

Interpreted by (if any): _____

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