Transrectal Ultrasound and Guide Biopsies of the Prostate

Patient Information

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Introduction

Your doctor has referred you for further investigations as there may be a problem with your prostate gland.

This is because of any of the following:

- Raised Prostatic Specific Antigen (PSA) blood test
- Your prostate doesn’t feel entirely normal
- You have experienced pain in your bones

PSA

Prostatic Specific Antigen (PSA) is a protein that is produced by the prostate.

All men have PSA in their blood stream at a certain level. That level is dependant on:

- Your age
- The size of the prostate

The older you are and the larger your prostate size is, the more PSA is produced and is secreted into your blood stream. Just because your PSA maybe raised, doesn’t automatically mean that there is cancer there.

A raised PSA blood test may mean that there is cancer in the prostate but the blood test alone is just a warning sign that has prompted these further investigations.

The prostate gland

The prostate gland is a small gland about the size of a walnut that lies at the neck of the bladder in men. It has two lobes: left and a right. Part of the water pipe (urethra) travels through the middle of the prostate. When the prostate gets enlarged it can narrow this part of the water pipe and is what causes symptoms with reduced flow.
Investigation

Your appointment is initially for a consultation, examination and for further tests to determine whether your prostate needs treatment. You are able to eat and drink normally before this procedure.

There is really no other way to access the prostate for any possibility of disease or cancer other than ultrasound and biopsy. However, MRI scanning is becoming increasingly important in assessing the prostate and possible areas of cancer within it.

On arrival in the outpatient clinic you will be met by a nurse who will make sure you have received and read this information leaflet. The nurse will then ask you for a sample of urine which will be tested in clinic and then sent to the laboratory for analysis to check for any infection. You can bring a sample with
you if this is more convenient.

You will then be taken into a preparation room and asked questions about your health and if you are taking any medication. Please bring a list of tablets and medicines you are taking.

If you are taking aspirin, clopidogrel or Dipyridamole please stop taking these drugs 7 days prior to the biopsy.

If you are taking Warfarin, Rivaroxaban or Apixaban you should stop these 3 days before your biopsy.

If you take any of these medications for cardiac stents or artificial heart valves please consult your GP.

Failure to stop these drugs may result in your investigation being cancelled. If you are unsure whether it is safe for you to stop these drugs, please contact your GP for advice. If you are taking herbal remedies for your prostate e.g. St. John’s wort, please also stop taking these 48 hours before your appointment.

**Consultation**

The nurse will then take you through to the consulting room where you will see the doctor. The doctor will then ask you about your health and your ability to pass urine. You will also be asked to undress from your waist down and lie on an examination couch.

Next the doctor will put a needle into a vein in your arm and take a blood sample to repeat your PSA blood test. This is necessary so that we can compare it to the PSA result that your GP sent to us. This is the only test to check the activity in your prostate.

The doctor will then give you antibiotics through the needle in your arm to reduce the risk of infection.

The doctor will then want to examine your prostate to determine the consistency of the gland and to check for any obvious abnormalities. This is the only way to feel the prostate adequately.

To do this he will ask you to turn onto your left hand side, with
your knees bent up so that you are curled up in a ball. He will then insert a gloved finger into your back passage and feel your prostate gland. Your GP may have done this also.

After that examination he will be able to decide whether an ultrasound examination of your prostate is required. This allows the doctor to take pictures of the prostate prior to biopsies being taken. This is the only way we can scan the prostate adequately. Following the ultrasound the doctor will then take some biopsies from the prostate gland.

**Ultrasound and biopsy of the prostate**

To do an ultrasound examination of the prostate we will have to pass a probe into the back passage (rectum) and up to the prostate. When the probe is in place we can view your prostate on the scanner.

Sometimes it is difficult to decide if there are any abnormalities with the prostate. We then can go on with the procedure and perform biopsies of the prostate. First the doctor will inject some local anaesthetic around the prostate. This is given through a needle which is attached to the probe that is in your back passage. This will make the procedure more comfortable for you. After the local anaesthetic is given, a special instrument will be passed through the probe and the tissue samples (biopsies) will be taken.

We usually take several tissue samples (biopsies) from the right lobe of the prostate and several from the left. As the biopsies are taken you may hear a ‘snapping noise’. This is nothing to worry about it is merely the instrument taking the samples.

After the biopsies have been taken the probe will be removed. You will need to lie on the couch for a few minutes to recover. The nurse will then let you get up and get dressed. You will then have another discussion with the doctor. Please do not cycle or use a motor bike to travel for this appointment. You are able to drive though.
Results

We will receive the results of your blood test and biopsies 2 weeks later. You will be sent an appointment approximately 2 weeks after that to discuss your results in the cancer centre clinic. You may bring a family member or a friend to any appointments you have. If you need any further information after you have received your results, please contact the specialist nurses on 0121 371 6926.

Immediate care after your biopsies

You will be asked to stay in the department for up to 1 hour, until the nurse is happy you have recovered. It is very important that you drink plenty of fluids after your procedure. This helps prevent any infection and helps clear any blood that you may have in your urine. Any drink e.g. water, tea, coffee, squash is allowed however, please refrain from drinking alcohol for 24 hours.

What to expect after the biopsies

Blood in the urine

It is normal to see blood in your urine occasionally for up to 2 weeks after your procedure. Sometimes the blood may clear and then start again after a day or two. Please do not be concerned. If you see any blood in your urine, increase your drinking until it is cleared. If you experience severe bleeding or the blood doesn’t appear to be reducing, please ring the specialist nurse on 0121 371 6926 for advice, or contact your GP or go to your nearest Accident & Emergency department.

Blood in your semen

You may intermittently see blood in your semen after intercourse, for several weeks after the biopsies. This can even continue for up to 2 months. It may appear brown or muddy in colour. Again, this is nothing to be alarmed about and is perfectly normal after this procedure.
Blood in your stool
It is normal to notice blood when you have your bowels open. You may notice this when you wipe yourself after a bowel movement. Again, this is normal and can last for a week or two.

Complications

Bleeding
As mentioned before, blood in your urine, stool or semen is normal but if you experience more pronounced bleeding or bleeding that doesn’t stop then please contact the specialist nurses for advice 0121 371 6926 your GP or your nearest A&E department.

Infection
At the beginning of the procedure you will be given antibiotics to try and prevent infection however, despite this precaution, 1% of patients will develop an infection requiring treatment. The reason for this occurring is that your prostate has to be reached via your back passage (rectum) which isn’t a sterile route. When the probe is passed through the back passage and biopsies are taken, bacteria that live in your back passage can inadvertently be transmitted up into your prostate and an infection will follow. If you have any of the following symptoms You must seek advice immediately:

• Fever/high temperature
• Flu like symptoms
• Shivering
• Severe difficulty on passing urine
• Excessive blood in the urine
• Excessive bleeding in the bowel motion (passing blood clots)

Please do not wait thinking things will improve – get advice immediately.

If you cannot contact anyone at the hospital or your GP go to your nearest A&E department and take this leaflet with you.
This leaflet is not intended to worry or alarm you, but merely to inform you about the procedure you are about to undergo.

If you have any further questions or need any further advice please do not hesitate to contact one of the specialist nurses on the number below:

**Clinical Nurse Specialists in Urology** – 0121 371 6926

Alternatively you can call the hospital switch board on **0121 627 2000** and ask them to bleep one of the urology specialist nurses.

If the appointment you have been given is not convenient please contact:

**Urology Clinic Coordinator** – 0121 627 2878

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The Trust provides free monthly health talks on a variety of medical conditions and treatments. For more information visit [www.uhb.nhs.uk/health-talks.htm](http://www.uhb.nhs.uk/health-talks.htm) or call 0121 371 4957.

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