

## Transrectal ultrasound guided prostate biopsies

Transrectal ultrasound guided prostate biopsies are required when there is the suspicion of prostate cancer because of a raised PSA (prostate specific antigen blood test) or DRE (digital rectal examination of the prostate). This minor procedure is usually performed under local anaesthetic and takes about 10 minutes.

Anticoagulants such as warfarin, platelet inhibitors such clopidogrel and sometimes aspirin need to be stopped a week before the biopsy. It is important to try and have an empty rectum for the procedure. To minimise the chances of developing a urinary tract infection, antibiotic tablets are given before and after the procedure to drop the infection rate to about 1%. One 500 mg ciproxin tablet is taken 2 - 3 hours before the procedure and one the evening after the procedure. The tablets should not be taken with milk or antacids. The bladder should be at least partly filled and must not be empty.

The prostate ultrasound is performed by placing a finger shaped transducer through the anus and into the rectum just behind the prostate. This is only a little more uncomfortable than a digital rectal examination. The prostate size is measured and any abnormal looking areas are noted to be biopsied later. 1% lignocaine local anaesthetic is infiltrated to block the nerves to the prostate and the biopsies are taken using a very fine needle which is guided into the prostate under ultrasound control. A click is heard from the biopsy gun and the needle takes a minute sample of the prostate about 15 mm x 0.5 mm. This is usually performed 16 times with the biopsy specimens sent off to the pathologist and results will be available a day or two later.

It is common to lose a small amount of blood from the rectum and from the penis for a day or two and occasionally longer. Blood stained ejaculation, initially red then dark brown may follow the biopsies for some time and should be of no concern. Observation for about 20 minutes is required after the biopsies. Nothing energetic or no important plans should be made for the rest of the day after the biopsies but activities are not restricted the following day. Simple analgesics such as paracetamol are sometimes useful for perineal discomfort. Rare serious complications include heavy rectal bleeding and the shakes and a fever from septicaemia. If there is any concern about these complications help should be obtained as readmission to hospital could be required.



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