Transrectal ultrasound guided biopsy of prostate

This is a procedure by which biopsies are taken of the prostate gland to determine whether or not you have prostate cancer. The reason you’re having this is either because your PSA is elevated or you have a lump on your prostate. Just because you have an elevated PSA does not mean you have prostate cancer and in addition not all lumps on the prostate are prostate cancer either. Unfortunately there are no scans available that can tell benign from malignant prostate tissue reliably and so the only way to tell is to get tissue directly from the prostate by taking a biopsy.

Procedure

The biopsy is done via the anus, utilising a special ultrasound probe. The probe allows your urologist to see the prostate in detail. Most prostate cancers occur in the outer part of the gland and the ultrasound allows the urologist to direct most of the biopsies into these high risk areas. Once the probe is in place local anaesthetic is injected into the nerves of the prostate in order to numb the gland. The local anaesthetic works almost instantaneously. Although the local anaesthetic has been shown to make a big difference, most patients will still experience some discomfort during the procedure. Preoperative oral pain relief is given to help with this. We also offer you diazepam pre-operatively which can be helpful to relax you.

Biopsies are taken using a biopsy gun which sends a needle through the wall of the rectum and into the prostate taking a core of tissue as it does so. The number of cores taken depends upon the size of your prostate. If you have a very large prostate then unfortunately you do need more cores in order to accurately sample the gland. In general the procedure takes around 5 minutes.

Post Procedure

If possible we would encourage you to have the day off work following your biopsy. Although not painful as such, it can be an uncomfortable feeling for several hours following the operation. You can expect to have some blood in urine and also the ejaculate. Often patients have bleeding from the rectum on passing a bowel motion as well. This bleeding usually settles within 48 hours although sometimes can last for up to 2 weeks, particularly in the semen.

The main risk we are concerned about is that of post-operative infection. The reason for this is that the needles from the biopsy gun pass from the rectum which has a high bacterial count into the essentially sterile prostate. The risk of infection is actually surprisingly low, only in the order of about 2%, but if you get unwell you can become really unwell. Because of this you will be given some antibiotics prior to the procedure and it is vital that you take these. If you do get fevers or shaking chills after the biopsy you need to present at the emergency department of the hospital. Tell them you’ve had a prostate biopsy and they will give you intravenous antibiotics and possibly admit you for observation.

Results

We usually have the results within 5 to 10 days after the procedure. We realise that this can be quite an anxious time and as soon as we get the result we will let you know what they are. Hopefully of course there is no cancer there, but if there is we will arrange an appointment for you to be seen as soon as possible to discuss the various options available.

If there is no cancer present then this does not completely rule out that you have prostate cancer but it does make it unlikely that you have a significant cancer. It also does not mean that you may not develop cancer in the future. We would normally recommend that you continue to monitor your PSA and have annual prostate examinations, at least until you are 75 years old.