

DENBY STEELE

Urologist

Prostate fiducial marker implantation

Tiny inert gold seeds measuring 4 mm x 0.5 mm that show up on x-ray are now being used by the Radiation Oncology Department at the Royal Adelaide Hospital as fiducial markers to aid in localization of the prostate to improve the accuracy of radiation delivery.

Any anticoagulants such as warfarin should be ceased several days prior to the procedure. Anti-platelet drugs such as clopidogrel should be ceased 10 days prior to the procedure and aspirin 7 days prior to the procedure. Anti-inflammatory medication should be stopped 3 days before the procedure.

It is important to try and have an empty rectum for the procedure. It is not usually necessary but a suppository can be used beforehand. To minimise the chances of developing a urinary tract infection or septicaemia, a 500 mg ciproxin antibiotic tablet should be taken 2–3 hours before the procedure and another about 12 hours after the first tablet and this drops the infection rate to about 1%. Please inform us if you have a ciprofloxacin allergy.

The procedure will seem much like TRUS guided prostate biopsies. It usually takes about 20 minutes, after which you will be observed for another 20 minutes. You will be asked to lie on your left side with knees bent and legs tucked up, right on the right edge of the couch, in a similar position to that usually used for prostate biopsies.

A digital rectal examination is performed to lubricate the anus and the prostate ultrasound is performed by placing the finger shaped transducer through the anus and into the rectum just behind the prostate. This is only a little more uncomfortable than the digital rectal examination. Local anaesthetic is infiltrated under U/S control and is sometimes felt as brief discomfort. Three needles in turn are painlessly inserted and the gold seed fiducial markers are deployed within the prostate.

After the procedure no strenuous activity should be planned for the rest of the day but normal activities could be planned for the following day. It is common to lose a small amount of blood from the rectum and possibly from the penis for a day or two and occasionally longer. Blood stained ejaculation initially red then dark brown may follow the biopsies for even months and is no concern.

The rare but serious complications to be aware of after the procedure are rectal bleeding and septicaemia. Mr Steele should be contacted or you should present to a casualty if there is concern about the amount of rectal bleeding or you experience symptoms such as a temperature or the shakes and shivers that suggest an infection and could require treatment with intravenous antibiotics in hospital.

There is no specific follow-up after this procedure but you will have an appointment at the Radiation oncology Department at the Royal Adelaide Hospital to start radiotherapy.