



Fiducial marker insertion (prostate cancer)

This information is a guide for having fiducial markers (small gold pellets) inserted, prior to having radiotherapy for prostate cancer. The position of the prostate gland can move slightly, but by using these markers we are able to track the prostate to ensure the accurate delivery of the image guided radiotherapy (IGRT).

What are fiducial markers?

Fiducial markers are permanent small gold pellets or rods approximately 5mm in length which act as landmarks within or near the tumour site to ensure accurate targeting of the treatment beams during your radiotherapy.

Before your appointment

If you are taking any **steroids or anti-coagulants** (blood thinners e.g. Warfarin or Clopidogrel/Plavix), please contact the Brachytherapy Suite on 020 3826 2629 **as soon as possible (at least 14 days) before you attend for your appointment.**

What does fiducial marker insertion involve?

You will be given an appointment to attend the Cancer Centre. The procedure to insert the fiducial markers will take about 10 minutes, although you should expect to be in the centre for about 1 hour.

Three to five markers will be inserted into the prostate under ultrasound guidance by either a doctor or radiographer, in a procedure which is very similar to a prostate biopsy.

You will need to remove your trousers and underpants and put on a supplied gown with the opening to the back. For the procedure you will be required to lie on your back with your knees bent and supported on pads.

A local anaesthetic will be used to numb the area through which the needles will pass in order to place the markers. This is between the anus and scrotum. An ultrasound probe will then be placed in the rectum, and the markers are inserted using a needle which is guided into position inside the prostate using the ultrasound picture.

What are the possible side-effects?

Although there is no sensation within the prostate gland, the use of the rectal ultrasound and the passage of needles through the skin can be uncomfortable. **We would recommend** you take (if you are able to do so) two paracetamol tablets 30 minutes before your appointment. You may also find you have slight bruising around the area of the insertion.

There is a very small risk you may develop an infection after the procedure. Marker insertion also carries a small risk of causing blood in the urine or the seminal fluid; this may last from a few days to a few weeks.

When will I start my radiotherapy?

Once you have had the markers inserted you will be sent an appointment, which will be a minimum of one week later, for your planning scan. This is a CT scan which is used to plan your radiotherapy.



This publication has been produced by the Information team at the Lynda Jackson Macmillan Centre. Contributors include professionals, patients and carers from Mount Vernon Cancer Centre who have expertise and experience in the topics covered by this publication. All our publications are reviewed and updated regularly. If you would like any details of the references used to write this information please contact the LJMC on 020 3826 2555.