

Brachytherapy

This type of radiation therapy allows the doctor to give a higher total dose of radiation in a shorter time than is possible with external treatment.

Brachytherapy places the radiation source as close as possible to the cancer cells – thus treatment is given over a short distance. Instead of using a large radiation machine, the radioactive material, sealed in a thin wire, catheter or tube (implant) is placed directly into the affected tissue. This method of treatment concentrates the radiation on the cancer cells and lessens radiation damage to some of the normal tissues (organs at risk) near the cancer.

In remote brachytherapy a computer sends the radioactive source through a tube to a catheter that has been placed at the required site by the patient's doctor. The brachytherapy team watches the patient on closed-circuit television and directs the procedure. The radioactivity remains at the treatment site for only a few minutes. In some cases, several remote treatments may be required and the catheter may stay in place between treatments.

Because no radioactive material is left in the body, the patient can return home after the treatment. For prostate cancer the radioactive seeds implanted into the prostate stay in permanently. The patient goes home the following day; this can happen because of the properties of these radioactive seeds – very low in activity and energy. Remote brachytherapy has been used to treat cancers of the cervix, breast, lung, pancreas, prostate and oesophagus.

The side effects of remote brachytherapy depend on the area being treated. You are not likely to have severe pain or feel ill during or after this procedure.