



Brachytherapy

Brachytherapy is a form of radiotherapy where the source of radiation is placed very close to or within the patient's body. Brachytherapy allows very focused radiation, as the radiation source can be placed directly inside a tumour, with minimal dose to adjoining normal organs.

Brachytherapy is used in many different cancers. The most common use is in uterine cancers, as part of both radical & post-operative radiotherapy protocols. Other diseases in which brachytherapy can be used are head-neck cancer, breast cancer, skin cancer & soft tissue sarcoma.

The standard of care for brachytherapy is HDR (high-dose rate) brachytherapy utilising remote afterloading and computerised image-based planning. The high dose rate allows rapid treatment delivery, enabling the procedure to be done as a day-care treatment. The remote after-loading means that initially hollow applicators are inserted by the clinicians in the patient's body and the radiation source is loaded into these instruments later, so that there is no radiation exposure to the doctors, nurses and other staff involved. Use of CT & MRI scans and sophisticated Treatment Planning System (TPS) computers enable delivery of focused and accurate treatment.

Saroj Gupta Cancer Centre & Research Institute was the first institute in India to instal a HDR afterloading brachytherapy system. It has now installed a state-of-the-art HDR afterloading brachytherapy machine, the Flexitron, manufactured by Elekta AB (Sweden). This equipment is a very cost-effective solution as it uses a Cobalt-60 source, which has a long half life of 5.26 years, hence does not need changing every 3-4 months like the more commonly used Iridium-192 source.

SGCCRI has always been at the side of the underprivileged patients of the country and continues to provide treatment at low/nominal costs. It is also empanelled under the Swasthya Sathi scheme of the West Bengal Government. Cervical cancer continues to be the commonest gynaecological cancer in India, especially common among the rural underprivileged population and brachytherapy being vital to the treatment of this cancer, plays a crucial role in the fight against cancer and in so doing, empowers our women & preserves their families.