External beam radiation therapy (EBRT)

The LINAC is used to treat all body sites, using conventional techniques, Intensity-Modulated Radiation Therapy (IMRT), Image Guided Radiation Therapy (IGRT), Stereotactic Radiosurgery (SRS) and Stereotactic Body Radio Therapy (SBRT).

External beam radiation therapy (EBRT) is a type of radiation therapy that directs a beam of radiation from outside the body, toward cancerous tissues inside the body. The LINAC is used to treat all body sites, using Intensity-Modulated Radiation Therapy (IMRT), Image Guided
Radiation Therapy (IGRT), Stereotactic Radiosurgery (SRS) and Stereotactic Body Radio Therapy (SBRT), as well as conventional techniques.

How it works

EBRT delivers radiation to tumors using a linear accelerator (LINAC). This machine, which shapes radiation beams to the contours of the tumor, allows delivery of radiation from any angle as it moves around the patient. These treatments can be designed in such a way that they destroy cancer cells while sparing the surrounding normal tissue. Patients do not feel anything during treatment.

How long it takes

EBRT is typically administered daily over a period of six to eight weeks. Most people get treatment once a day for five days each week. Treatment usually takes place Monday through Friday. Patients may sometimes receive two treatments in the course of a single day. Each treatment takes a few minutes and is given as an outpatient procedure.

Types of Machines

- ARTISTE [1]
- TomoTherapy [2]
- TrueBeam [3]
- Versa HD [4]

*UCSF Main Site

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[2] https://radonc.ucsf.edu/tomotherapy
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