

Use of Electron Beam Therapy in the Treatment of Basal Cell Carcinoma

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Abstract

This project explains the importance of electron beam radiation and its use on basal cell carcinoma. Radiation therapy is a type of noninvasive cancer treatment. One type of radiation that can be used in radiation therapy is electrons. Electron beam therapy (EBRT) is used when the tumor is superficial or cannot be surgically removed due to being in a complex area. Electrons can produce a lower energy range which is why it is so great for skin cancers. Basal cell carcinoma (BCC) is a common skin cancer that can be killed off by EBRT. Basal cell carcinoma can be present where the sun hits most often, like areas such as the head, neck, scalp or limbs. BCC typically develops from chronic sun exposure, with increasing age or from family history of it. Basal cell carcinoma can appear as a colored bump, a dark lesion or a flaky patch. It can be treated with surgery, radiation therapy, adjuvant radiotherapy or palliative therapy depending on the patient's age, cancer site and severity. Cancer to the basal layer of the skin affects more than one million people each year.

Keywords: Basal cell carcinoma (BCC), radiation therapy, skin cancer, electron beam therapy