


# THE ROLE OF RADIATION THERAPY IN THE TREATMENT OF HIV-RELATED KAPOSÍ'S SARCOMA.

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- **Introduction**: Kaposi's sarcoma(KS) is the most frequent neoplasm occurring in patients with HIV-related AIDS and very often exhibits multifocal distribution so that a systemic approach is needed. A variety of therapeutic options exist, and choice of treatment depends on clinical form and stage, as well as lesion location and size; options include surgical excision, intralesional interferon alpha – 2b, local or extended field radiotherapy, and chemotherapy. KS is considered a radiosensitive tumor and Radiation Therapy (RT) has always played an important role in the therapeutic strategy of its various forms. RT is a valuable means of pain relief, bleeding control and edema palliation, but it is also an effective treatment modality for local control of skin and mucosal lesions in KS.
  - **Aim**: The role of radiation therapy in the treatment of HIV-related kaposi's sarcoma.
  - **Material- Methods**: Review article, pubmed, electronic data-base, key words: HIV-related Kaposi's sarcoma, Radiation therapy.



- **Results**: Looking forward the literature, Radiation therapy consideration, include the following: Radiotherapy often produces good therapeutic results with classic nodular KS but tends to be only palliative in patients with KS-AIDS. In localized nodular KS, conventional radiotherapy is highly effective. External beam radiation therapy( EBRT) it may be a good modality for superficial lesions. Deeper or unresponsive KS may be treated with standard non-EBRT or other approaches. Initial response to radiotherapy usually is complete or at least marked regression of the nodules. Radiotherapy may be more effective on new lesions than on chronic ones and may provide local KS control in patients with KS-AIDS. Low – voltage ( 100kV) photon radiation: 8-10Gy as single dose or 5-20 Gy over 1wk. EBRT: 4Gy once weekly for 6-8 wk consecutively.



- This can palliate bleeding, pain, or unsightly lesions. This may be given in the form of low-voltage (100kV) photons or electron-beam radiotherapy. Responses occur in 80-90% of patients. A higher cumulative dose (40Gy) results in better local control than lower doses (8Gy or 20Gy). Electron beam therapy is reserved for treatment of superficial lesions. This is usually given once weekly in 4Gy fractions. Recurrence may be common in adjacent, untreated areas, leading some authors to recommend extended-field radiotherapy to affect a higher cure rate. Patients with HIV are more prone to develop radiation-induced mucositis as well as hyperpigmentation, desquamation, and ulceration of treated lesions. In patients with widespread skin involvement, extended-field electron beam radiation therapy (EBRT) has been effective in controlling the disease. This approach appears to give better long-term control than piecemeal radiation of individual lesions. This type of therapy is also given in 4-Gy fractions weekly for 6-8 weeks.



- **Conclusion**: Radiation therapy is the most widely used and effective local therapy. Radiation therapy is an effective treatment modality for CKS and local control and is associated with minimal toxicity.
- **References** :
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  - Lewis J Rose. Kaposi sarcoma Treatment and Management . Medscape, Update 2015, ( April 16).