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Evolution of Cord Absorbed Dose during Larynx Cancer Radiotherapy, with 3D Treatment Planning and Tissue Equivalent Phantom

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Abstract : Radiation doses to tissues and organs were measured using the anthropomorphic phantom as an equivalent to the human body. When high-energy X-rays are externally applied to treat laryngeal cancer, the absorbed dose at the laryngeal lumen is lower than given dose because of air space which it should pass through before reaching the lesion. Specially in case of high-energy X-rays, the loss of dose is considerable. Three-dimensional absorbed dose distributions have been computed for high-energy photon radiation therapy of laryngeal and hypo pharyngeal cancers, using a coaxial pair of opposing lateral beams in fixed positions. Treatment plans obtained under various conditions of irradiation.

Keywords : 3D treatment planning, anthropomorphic phantom, larynx cancer, radiotherapy
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