Principles and Practice of Radiation Oncology: Levitt and Tapley's Technological Basis of Radiation Therapy: Practical clinical applications

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Abstract

Radiation oncology is a rapidly expanding field of medicine, as the result of both exciting new technological advances and major developments in the basic understanding and applications of radiobiology. Over half of all patients in whom cancer is diagnosed in the United States each year receive radiation therapy as either definitive treatment or an adjunct to surgery or chemotherapy. The advances in technology and the integral involvement of the radiation oncologist as part of the cancer-management team have increased the demand for books such as Principles and Practice of Radiation Oncology and Technological Basis of Radiation Therapy. The intended ...
Basic concepts in treatment planning -- Basic clinical parameters -- Clinical principles and applications of chemoirradiation -- Fundamentals of treatment planning in radiation oncology -- Simulation process in the determination and definition of the treatment volume and treatment planning -- Complex field arrangements: field shaping and separation of adjoining fields -- Electron beam therapy -- Treatment. Aids for external beam radiotherapy -- Three-dimensional treatment planning and conformal therapy -- Intensity modulate Technical Basis of Radiation Therapy: Practical Clinical Applications (Medical Radiology. 875 Pages·2006·29.8 MB·1,322 Downloads·New! Radiation Oncology) Seymour H. Levitt|James A. Purdy|Carlos A. Perez|Srinivasan Vijayakumar|Lut International Manual of Oncology Practice: (IMOP) - Principles of Medical Oncology. 1,033 Pages·2015·1.51 MB·1,464 Downloads·New! DeVita, Hellman, and Rosenberg's Cancer: Principles and Practice of Oncology Vi The 5 Essential Principles of Think and Grow Rich: The Practical Steps to Transforming Your Desires. 138 Pages·2018·30.51 MB·46,068 Downloads·New! of great wealth to demonstrate his moneymaking philosophies. The 5 Essential Principles of Think and Grow Clinical Application of Radiobiologic Principles. • Fractionation of radiation and altered fractionation schedules, such as accelerated hyperfractionated radiation therapy, make use of differences in the responses of normal and malignant tissues to irradiation in order to achieve higher therapeutic ratios. • Radiation has varied effects on normal tissues, ranging from early effects such as skin erythema to late effects such as carcinogenesis. Process in Radiation Treatment. • Process in treatment planning and quality control is essential to the safe and effective delivery of clinical radiation ...