

1. Record Nr.	UNINA9910300187003321
Titolo	Radiotherapy in Prostate Cancer : Innovative Techniques and Current Controversies // edited by Hans Geinitz, Mack Roach III, Nicholas van As
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015
ISBN	3-642-37099-3
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (288 p.)
Collana	Radiation Oncology
Disciplina	616.99463
Soggetti	Radiotherapy Oncology Urology Oncology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Imaging, delineation and immobilization: MRI and MR-spectroscopy -- PET imaging in prostate cancer -- Phase contrast X-ray imaging- next generation CT imaging -- Organ contouring for IMRT -- General aspects of patient immobilization -- Internal immobilization: From rectal balloon to hyaluronic acid -- Clinical endpoints: Biochemical recurrence-- a valuable endpoint? -- Overall and disease-free survival -- too long to wait? -- Late toxicity -- current scoring concepts -- Quality of life: Assessment and Correlates -- Dose escalation and new radiation techniques: Dose escalation -- an update on randomized clinical trials -- IMRT for prostate cancer -- IGRT- how and when -- Tracking in prostate cancer -- Locally advanced disease: Techniques of pelvic lymphatic irradiation -- Prophylactic treatment of the pelvic lymphatics: pro -- Prophylactic treatment of the pelvic lymphatics: contra -- Hormonal therapy and radiation therapy - randomized and prospective trials -- Treatment of clinically involved lymph nodes -- Hypofractionation: Hypofractionation in prostate cancer- biological aspects -- Hypofractionation: Clinical data -- Simultaneous integrated boost techniques -- Brachytherapy: Principals of 3D, highly conformal brachytherapy -- Seed implantation -- HDR brachytherapy -- Adjuvant

treatment and salvage treatment: Target volume definition in postoperative radiotherapy -- Randomized trials for adjuvant radiotherapy -- Salvage radiotherapy after radical prostatectomy -- Salvage prostatectomy after radiotherapy -- Use of protons and heavy ions: Proton therapy for prostate cancer: technological and clinical aspects -- There is evidence for the superiority of protons or heavy ions, pro -- There is evidence for the superiority of protons or heavy ions, contra. .

Sommario/riassunto

Radiation treatment is rapidly evolving owing to the coordinated research of physicists, engineers, computer and imaging specialists, and physicians. Today, the arsenal of “high-precision” or “targeted” radiotherapy includes multimodal imaging, in vivo dosimetry, Monte Carlo techniques for dose planning, patient immobilization techniques, intensity-modulated radiotherapy (IMRT), image-guided radiotherapy (IGRT), biologically adapted radiotherapy (BART), quality assurance methods, novel methods of brachytherapy, and, at the far end of the scale, particle beam radiotherapy using protons and carbon ions. These approaches are like pieces of a puzzle that need to be put together to provide the prostate cancer patient with high-level optimized radiation treatment. This book examines in detail the role of the above-mentioned innovative radiation techniques in the management of prostate cancer. In addition, a variety of current controversies regarding treatment are carefully explored, including whether prophylactic treatment of the pelvic lymphatics is essential, the magnitude of the effect of dose escalation, whether a benefit accrues from hypofractionation, and what evidence exists for the superiority of protons or heavy ions. Radiotherapy in Prostate Cancer: Innovative Techniques and Current Controversies is intended for both radiation oncologists and urologists with an interest in the up-to-date capabilities of modern radiation oncology for the treatment of prostate cancer.
