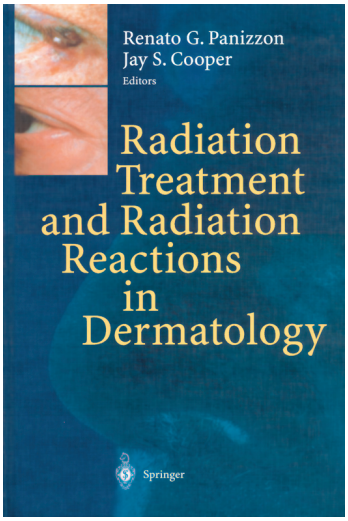
Panizzon RG, Cooper JS, editors. Radiation Treatment and Radiation Reactions in Dermatology. Berlin, Heidelberg, New York: Springer-Verlag, 2004. Format: hard cover, one volume. Pages 168, chapters 16. ISBN 3-540-00345-2



It is a real pleasure to review this book as one of the rare textbooks in dermatologic radiotherapy. This is the second book on the issue, the first entitled ***Modern Dermatological Radiation Therapy,*** edited by R.G. Panizzon and H. Goldschmidt, appeared ten years ago. The lapse of time imposed the need of a novel approach in dermatologic radiotherapy. The editors of the present book are internationally renowned experts in the field. Sixteen coauthors from Europe and United States as well as from India and Australia have been engaged in writing the book. The book is illustrated with 75 photographs, mostly color ones, and 28 tables. Each chapter is accompanied by an extensive list of recent references.

First chapter is dedicated to physical aspects that should be known by all those dealing with dermatologic radiotherapy in practice (e.g., production of electromagnetic radiation, brachytherapy, production of electron beams, photon interactions and attenuation, shielding of normal tissues, calibration and units of radiation, dose delivery: a primer, photoelectric and compton processes, linear attenuation coefficient, treatment time calculation). The text is accompanied by very convenient schematic presentations and tables helping the reader comprehend this complex matter more easily.

Second chapter deals with skin radiobiology. This chapter reviews general effects of ionizing radiation at the cellular level, radiobiological reactions in the skin, and many of the specific changes induced by ionizing radiation in the various cellular components of the skin (melanocytes, Langerhan's cells). The principal features of radioprotection and radiosenzitization as well as some specific agents that induce these effects are discussed.

Third chapter written by A.B. Bodina describes specific equipment and tackles financial aspects of dermatologic radiotherapy. X-ray therapy has been an important treatment option in dermatology for nearly 100 years now. Recently, there has been a revival of interest in both superficial x-ray therapy and grenz ray therapy. This chapter guides the physician through each step of starting a radiation therapy unit.

The chapter on radiotherapy for benign dermatoses has been written by one of the editors, Renato G. Panizzon. In contrast to radiotherapy of skin tumors, radiation therapy for benign skin diseases is rarely performed since efficient topical treatments are available. This is also the reason why irradiation of benign skin diseases is not first-line treatment, except for keloids where early and initial treatment immediately after surgical procedure is indicated. The possible indications when other treatment procedures have failed are chronic eczematous dermatitis, chronic psoriatic lesions, lymphocytomas, and some rare indications such as chronic lichen planus or chronic paronychia. It is very important that FDA recommendation on ionizing radiation therapy for benign dermatoses be considered before starting radiotherapy for these indications. The same rules apply to the use of grenz ray therapy for benign dermatoses.

Sixth chapter is dedicated to the indications and office use of superficial radiotherapy. The chapter is richly illustrated by photographs

Acta Dermatovenerol Croat
2005;13(4):254-255

presenting options for irradiation planning and patient protection. Eighth chapter also deals with indications and practical use of superficial radiotherapy, pointing to specificities of some localizations of malignant epidermal tumors (e.g, nose).

In the chapter entitled Staging of skin tumors: a mirror of their biological behavior, written by the other editor, J. S. Cooper, staging of various malignant skin tumors is discussed. Staging is a form of shorthand that groups tumors of similar extent and prognosis. Because of the need to link extent to prognosis, the rules of staging of a particular tumor can be viewed as a brief description of the common major steps in the biologic progression of that tumor. This chapter discusses the staging criteria for common skin tumors and thereby provides some insight into the different ways in which different skin tumors tend to progress. Despite the common title “skin tumors”, cells of different origin impart characteristic biologic behaviors of each type of skin tumors. This chapter presents staging system for each type of tumor and relates it briefly to that tumor behavior.

A separate chapter is dedicated to electron beam therapy. This is a very important treatment modality in dermatologic radiotherapy. The physical characteristics of electron radiation are well suited for the treatment of superficial lesions, since the depth of radiation penetration can be precisely controlled, with little exposure of deeper tissues. Compared with superficial x-rays, electrons can treat a larger area of the skin, including treatment of the entire skin. The text is accompanied by excellent schematic presentations of the practical use of electrons in whole skin irradiation.

Tenth chapter deals with the use of dermatologic radiotherapy in the management of skin lymphomas, being primarily focused on Total Skin Electron Beam therapy (TSEB). This chapter is also enriched with a number of photographs and schematic presentations.

Separate chapters tackle the use of radiotherapy in the management of Kaposi sarcoma, Merkel cell carcinoma and melanoma. It is known that radiotherapy has a limited role in the treatment of malignant melanoma. However, in certain circumstances, radiation therapy can be curative, can decrease the risk of surgical failure, and can provide effective palliation of distressing signs and/or symptoms. This chapter discusses appropriate indications for radiotherapy in the management of malignant melanoma.

The penultimate, fifteenth chapter deals with long-term (chronic, late) radiation reactions. Clinical and histologic signs are described, along with molecular basis of chronic radiodermatitis and radiogenic ulcer. Therapeutic options for these very distressing lesions that develop years after radiotherapy are presented. Also, ample data on the incidence of radiogenic skin cancer are given.

The last chapter is dedicated to incidental cutaneous exposure to ionizing radiation, describing the pathophysiology of cutaneous radiation reactions, the clinical picture and diagnostic difficulties encountered in cutaneous radiation syndrome, and treatment options.

The book ***Radiation Treatment and Radiation Reactions in Dermatology*** encompasses the complete issue of the use of radiotherapy in dermatology, in the treatment of malignant tumors and lymphomas as well as of some benign dermatoses. It is a precious handbook and textbook for all those engaged in dermatologic radiotherapy, i.e. dermatologists experienced in the field of radiotherapy, radiotherapists-oncologists, physicists, and other professionals dealing with dermatologic radiotherapy.

Aida Pašić, MD, PhD