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Edited by

Andrew W. Bruce and John Trachtenberg

With 37 Figures

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Andrew W. Bruce, FRCS, FRCS(C)
Professor and Chairman, Division of Urology, University of
Toronto, Suite 14-205, The Eaton Wing, Toronto General Hospital,
200 Elizabeth Street, Toronto, Ontario, Canada M5G 2C4

John Trachtenberg, MD, FRCS(C)
Associate Professor, Division of Urology, University of Toronto,
Toronto General Hospital, Suite 14-209, The Eaton Wing,
200 Elizabeth Street, Toronto, Ontario, Canada M5G 9Z9; and
Career Scientist, Ministry of Health, Province of Ontario

Series Editor

Geoffrey D. Chisholm, ChM, FRCS, FRCSEd
Professor of Surgery, University of Edinburgh; and Consultant
Urological Surgeon, Western General Hospital, Edinburgh, Scotland

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Series Editor's Foreword

Carcinoma of the prostate increasingly dominates the attention of urologists for both scientific and clinical reasons. The search for an explanation and the prediction of the variable behaviour of the malignant prostatic cell continues unabated. The search for more precise tumour staging and more effective treatment is equally vigorous. Editors Andrew Bruce and John Trachtenberg have assembled acknowledged leaders in prostate cancer to present those areas of direct interest to the clinician. There are a number of other topics that might have been considered but most of these, such as experimental tumour models or biochemical factors affecting cell growth, still lack immediate application for the clinician.

Carcinoma of the prostate continues to have its highest incidence in the western world, and the difference in comparison with the incidence in the Far East appears to be real and not masked by diagnostic or other factors. A number of other epidemiological aspects need careful analysis: Is the incidence increasing? Is the survival improving? Is the prognosis worse in the younger patient? Epidemiological data are easily misused and misinterpreted so that a precise analysis of the known facts makes an important opening chapter to this book.

The comprehensive review of the main methods for grading prostatic cancer provides more evidence that there is, as yet, no wholly reliable method for determining the malignant potential of the cell. It is also evident that the measurement of hormone receptors, either cytosolic or nuclear, is not yet sufficiently precise for predicting tumour response. Nevertheless, the two chapters on this topic illustrate the importance of recent studies and how they have added to our understanding of morphology and function of the malignant cell.

The steady progress in more precise tumour staging is described in chapters on tumour markers and imaging and these provide up to date assessments of the methods available. The chapter on staging indicates the importance of using tried and trusted and available

methods for a system to be internationally useful. The chapter on the diagnosis and significance of pelvic lymph node metastases addresses a series of important questions and gives the clinician clear answers.

Doctors Bruce and Trachtenberg have planned the chapters on management so that acknowledged leaders can present their evidence in support of their views. The controversial management of localised cancer faces the central fact that the selection of patient and of treatment must take account of a wide range of factors in order to obtain the best results in terms of cancer control and quality of life. The present status of interstitial radiotherapy and the case for external beam radiotherapy for certain tumours are given by leaders in these fields but the reader can be assured that there is more than sufficient evidence on the advantages and disadvantages of these methods to draw independent conclusions.

Recent years have witnessed a surge in developments in hormonal control and chemotherapy but the one absolute fact that can be established from these recent reports is the need for properly conducted clinical trials before any new drug or combination can be proclaimed as a breakthrough. It is therefore most appropriate that this book concludes with a chapter on clinical trials in prostatic cancer: perhaps it should have been the opening chapter, for here are spelled out the traps for the unwary in their endeavours to conquer this frustrating cancer.

Edinburgh, June 1987

Geoffrey D. Chisholm

Preface

Prostatic cancer is the most common urologic malignancy, yet it remains one of the great enigmas for the treating physician. That this disease can appear so benign in many, while so devastatingly malignant in others, is one of the mysteries of clinical medicine. The past three decades have witnessed major advances in the basic understanding of carcinogenesis, as well as exciting advances in the diagnostic and therapeutic modalities for dealing with many cancers. While much information about prostatic cancer has been gleaned in this period, it is only too frustrating to have to admit that survival of patients with this disease has not changed substantially. Thus it is not difficult to understand the prevailing undercurrent of controversy that exists in regard to the diagnosis and treatment of this neoplasm. In this book, a group of authorities in the field provide us with their experience and special expertise. The aim of the text is to highlight the areas of difficulty and for the participants to present their personal approach to each problem area.

The book is divided into two sections. The first deals with recent important advances in basic science as it relates to prostatic cancer. A fundamental view of the immense scope of this problem is presented in the introductory chapter, which explores the epidemiology of the disease. Histologic grading methods used are discussed and the variables associated with the different methods are presented. The clinical methods of staging this neoplasm are reviewed and updated, and special emphasis is given to the new advances available in imaging technology. Other chapters address the factors that should improve our ability to detect those patients at high risk of developing the disease and those patients who are likely to be treatment failures. The second section of the book deals with the specific problems of treating the patient in each stage of the disease: from small volume localized disease to disseminated hormone-resistant patterns. The authors have attempted to summarize the present controversies within their own areas of interest, to explain and support their approach to the problem, and finally to predict what research

developments are likely to have an impact on disease detection and management in the future. Integration of these therapeutic concepts may yield a more favorable prognosis for our patients.

Finally, we wish to express to all our contributors our most grateful thanks for their support and patience.

Toronto
March 1987

Andrew W. Bruce
John Trachtenberg

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Contributors

Malcolm Bagshaw, MD

Professor and Chairman, Department of Therapeutic Radiology,
Stanford University Medical Center, Stanford, California 94305,
USA

Peter N. Bretan, MD

Department of Urology, School of Medicine, University of California
San Francisco, San Francisco, California 94143, USA

Francisco Bretas, MD

Scott Department of Urology, Baylor College of Medicine, Houston,
Texas, USA

Andrew W. Bruce, FRCS, FRCS(C)

Professor and Chairman, Division of Urology, University of Tor-
onto, Suite 14–205, The Eaton Wing, Toronto General Hospital, 200
Elizabeth Street, Toronto M5G 2C4, Ontario, Canada

William J. Catalona, MD

Professor and Chairman, Division of Urologic Surgery, Washington
University School of Medicine, St Louis, Missouri, USA

B. K. Choe, MD

University of Illinois, Clinical Sciences Bldg. 518J, Dept. of Surgery,
P.O. Box 6998, Chicago, Illinois 60680, USA

John G. Connolly, MD

Professor, Division of Urology, University of Toronto Women's
College Hospital, 76 Grenville Street, Toronto, Ontario, Canada,
M5S 1B2

James I. Harty, FRCSI, FACS

Division of Urology, Department of Surgery, University of Louisville
School of Medicine, Louisville, Kentucky 40292, USA

Robert P. Huben, MD

Chief, Department of Urology, Roswell Park Memorial Institute,
Buffalo, New York, USA

Betty G. Mobbs, MD

Associate Professor, Department of Surgery, Room 7336, Medical Sciences Building, University of Toronto, Toronto, Ontario, Canada M5S 1B2

F. K. Mostofi, MD

Chairman, Department of Genitourinary Pathology, Armed Forces Institute of Pathology, Washington DC 20306, USA

Gerald P. Murphy, MD

Chairman and Co-ordinator Urologic Co-operation Oncology Group, Professor of Urology, Department of Urology, State University of New York at Buffalo, 139 Parker Hall, Buffalo, New York 14214, USA

Carl A. Olsson, MD

Professor and Chairman, Department of Urology, College of Physicians and Surgeons of Columbia University, Director J. Bentley Squier Urological Clinic, Presbyterian Hospital in the City of New York, Columbia Presbyterian Medical Center, 622 West 168th Street, New York, New York 10032, USA

Peter T. Scardino, MD

Professor of Urology, The Scott Department of Urology, Baylor College of Medicine, Suite 1003, 6560 Fannin Street, Houston, Texas 77030, USA

Howard I. Scher, MD

Associate Attending Physician, Solid Tumor Service, Department of Medicine, Memorial Sloan- Kettering Cancer Center, 1275 York Avenue, New York, New York 10021, USA

Pramod C. Sogani, MD, FRCS(C)

Associate Attending Surgeon, Solid Tumor Service, Department of Medicine, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, New York 10021, USA

John Trachtenberg, MD, FRCS(C)

Associate Professor, Division of Urology, University of Toronto, Toronto General Hospital, Suite 14-209, The Eaton Wing, 200 Elizabeth Street, Toronto, Ontario, Canada M5G 9Z9

Willet F. Whitmore Jr., MD

Attending Surgeon and Professor of Surgery, Cornell Medical Center, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, New York 10021, USA

Richard D. Williams, MD

Professor and Chairman, Department of Urology, University of Iowa, Iowa City, Iowa, 52245, USA

J. M. G. Wilson, FRCP

Millhill House, 77 Millhill, Musselburgh, Midlothian EH21 7RP, Scotland, UK (Formerly at the Scottish Health Service, Common Services Agency, Information Service Division)

Alan Yagoda, MD
Attending Physician, Acting Chief, Solid Tumor Service, Department of Medicine, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, New York 10021, USA