

Preface

Prostate cancer is the most common form of cancer in American men other than skin cancer. It is estimated that about 185,000 new cases of prostate cancer will be diagnosed in 2008 in the USA alone. Almost 30,000 men will die of the disease in 2008 in this country. It is the second-leading cause of cancer death in men after lung cancer. While a man has a 15% chance of being diagnosed with prostate cancer in his lifetime, only 3% die of the disease. Thus, in the modern era, the vast majority of men live for very long periods of time. Over the course of the last 20 years, numerous discoveries and refinements in management have occurred in this disease. There have been refinements in prostate biopsy technique, in imaging of prostate cancer, in surgical technique (e.g., the introduction of laparoscopic and robotic prostatectomy), in the delivery of radiation therapy, and in the treatment of advanced disease. Furthermore, the use of PSA as a screening tool has resulted in a far greater number of men being diagnosed with prostate cancer at its earliest stages. This has also translated into younger men being diagnosed with prostate cancer. Thus, a man's long-term sexual function has become an even bigger issue now given these factors.

With regard to the sexual function consequences of the treatment of prostate cancer, the field has changed dramatically over the course of the last 20 years. Many of the developments in this area have been "under the radar" and have been missed by most clinicians. Increased understanding of the pathophysiology of post-prostatectomy sexual dysfunctions and post-radiation therapy erectile dysfunction, the controversial concept of penile rehabilitation, neuromodulatory drugs, and the impact of androgen deprivation therapy on sexual function are but a few of the areas in which information explosion has occurred. The purpose of this book is to give the practicing clinician, whether a urologist, radiation therapist, medical oncologist, internist, or primary care physician, a comprehensive state-of-the-art overview of sexual function changes and their treatments in the prostate cancer patient.

I am proud to say that I have been joined in this effort by the world's leading authorities in this area. I am indebted to my chairman, Dr. Peter T. Scardino, for his masterful foreword. Dr. Scardino is a surgeon-scientist who needs no introduction. He is Chairman of the Department of Surgery at Memorial Sloan-Kettering Cancer Center and has made major contributions in the treatment of and research in prostate cancer.

This book opens with a chapter on sexual dysfunctions following prostate cancer treatment. It would be remiss of us if we concentrated solely on erectile dysfunction as there are other sexual problems that are prevalent, specifically, orgasm changes, penile length changes, and the development of Peyronie's disease after radical prostatectomy. Clinical experience tells us that a man's erectile function in the months leading up to his prostate cancer treatment is different than that before his diagnosis. A chapter by Dr. David F. Penson and Dr. Christian J. Nelson highlights this, dealing with the impact of prostate cancer diagnosis on sexual function. Dr. Kevin T. McVary, a urologist, and Dr. Carol A. Podlasek, a scientist, both world authorities on the consequences of nerve injury on erectile tissue, discuss the pathophysiology of erectile function changes following radical prostatectomy using their experience with the cavernous nerve injury model as an example.

Dr. Victoria J. Croog and Dr. Michael J. Zelefsky, of the Department of Radiation Oncology at Memorial Sloan-Kettering Cancer Center, follow with a chapter of the pathophysiology of erectile dysfunction following radiation therapy. Dr. P. William McLaughlin and Dr. Gregory Merrick, both radiation oncologists, discuss the intriguing concept of erection-sparing radiation therapy and whether this is possible or not. Dr. Arthur L. Burnett II discusses the role of neuromodulatory drugs in the radical prostatectomy patient. Dr. Burnett has contributed significantly to this literature from a clinical and laboratory standpoint. It is exciting to think that, at some point in time, we may have drugs that prevent cavernous nerve injury or promote cavernous nerve regeneration at the time of surgery or even after radiation therapy.

A chapter on intraoperative maneuvers designed to minimize postoperative erectile dysfunction is written by Dr. Joseph A. Pettus and Dr. Farhang Rabbani. Dr. Rabbani, one of the world's authorities on cavernous nerve interposition grafting, gives a comprehensive and critical account of this strategy. Dr. Alexander Müller and I have contributed a chapter on the controversial topic of penile preservation and rehabilitation and present the animal and human data supporting this concept at this time. Dr. Ricardo Munarriz and Dr. Abdul Traish, a urologist and basic scientist, respectively, from Boston University, highlight the impact androgen deprivation has on male sexual function. They present elegant data that outline the severity of the impact that an agonadal state has on erectile function.

Dr. Francesco Montorsi (the founding father of the concept of penile rehabilitation) and Dr. Andrea Salonia, from Milan, Italy, discuss the use of PDE5 inhibitors in the radical prostatectomy patient population and extensively review the literature pertaining to the use of these drugs. Dr. Andrew McCullough, from New York University Medical Center, discusses intracavernosal injection therapy, while Dr. Brian R. Lane and Dr. Drogo K. Montague, from the Cleveland Clinic Foundation, discuss non-pharmacologic therapies for erectile dysfunction, including penile implant surgery, after the treatment of prostate cancer.

The penultimate chapter is written by Dr. Abraham Morgentaler, from Boston, who discusses the highly controversial subject of androgen supplementation in the prostate cancer patient. Dr. Morgentaler, the world's authority in this area, makes a cogent argument in favor of a rational approach to the use of androgens in the prostate cancer patient. The book finishes with a "crystal ball" view for the future of

post-radical pelvic surgery pharmacotherapy. This chapter is written by Drs. Tony Bella and Tom F. Lue, from the University of California, San Francisco, and no one is in a better position to address this issue than they are. Dr. Lue is the world's authority on stem cell therapy for erectile dysfunction.

It is my hope that you, as a clinician, will find this information useful. Furthermore, I hope that it will at the very least provoke you into thinking differently about these problems in this population and perhaps even alter how you practice.

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