Book Review


In the past 5–10 years our ability to identify women at increased risk for breast cancer due to hereditary, epidemiological, and behavioral factors has grown by leaps and bounds. Several genes (BRCA1, BRCA2, PTEN, P53, etc.) have been identified as culprits in a number of genetic conditions and hereditary syndromes that increase risk of breast cancer. Clinical molecular testing is now available for some of these genetic predisposition syndromes. In an effort to bring research findings into clinical use and in response to increasing interest from the public and the medical community, cancer risk assessment clinics have been established at most academic and many private institutions. These clinics have been successful in identifying women at high risk for breast cancer and providing reasonably accurate estimates of their risks. This success is in turn creating a growing number of women who demand state of the art management of their identified high risk. Here is where our present challenge lies. We can establish breast cancer predisposition, but we do not have proven methods for prevention or risk reduction. In addition, management of these women requires an integrated approach because of a concurrent increased risk for ovarian cancer and other health issues that tie into breast cancer interventions (e.g., cardiovascular health). Such an integrated approach to risk management requires knowledge of cancer genetics, epidemiology, radiology, surgery, oncology, and gynecology. Furthermore, for effective management, psychological, ethical, legal, and social issues must be addressed.

Management of Patients at High Risk for Breast Cancer is designed to respond as comprehensively as possible to this challenge, given our current state of knowledge. It is a collection of 16 chapters, written by well-known researchers and clinicians active in the field, providing a concise overview of the various topics involved in management of breast cancer risk. The book begins with coverage of epidemiology, genetics, and clinical characteristics of breast cancer. Unfortunately, the first chapter does little to improve our understanding of breast cancer epidemiology. Sentences seem like unfinished thoughts, paragraphs feel disjointed, and the reader is left more confused than before. Perhaps this is due to the breadth of material that it attempts to cover. But do not be discouraged. In the next chapter, Genetics...
of Breast Cancer, Wendy Rubinstein provides a first-rate overview of hereditary syndromes involving predisposition to breast cancer (including HNPCC, Cowden, Li-Fraumeni, Ataxia Telengiectaxia). She diligently and repeatedly emphasizes the need for genetic counseling and informed consent. The third chapter, though the shortest, makes its contribution by pointing out the current inadequacies of screening and chemoprevention.

The chapter on quantitative risk assessment provides the most exquisite analysis, comparison, and critique of risk assessment methods I have ever encountered. It is the only one written solely by a genetic counselor (Suzanne O’Neill) and is unsurpassed in quality by any other in the book. Chapters 5 through 12 cover in-depth topics such as ovarian cancer, breast imaging, percutaneous biopsies, prophylactic mastectomy, and chemoprevention. They are all well referenced and have useful tables, figures, and graphs. The sections on imaging include numerous pictures to illustrate definitions and classification of findings on mammographic, sonographic, and magnetic resonance images. Development of a Risk Assessment Clinic is a chapter that genetic counselors starting or new to such a clinic will find a helpful guide.

The remainder of the book is devoted to issues of psychological management of these women as well as ethical and legal issues, cost-effectiveness, and population-based prevention strategies. Donna Posluszy and Andrew Baum do a fine job of bringing to light the myriad of psychological and emotional issues for high-risk women. Although most genetic counselors with long-term experience in this area are familiar with these factors, the awareness of other clinicians will be well served by this chapter. Genetic counselors are called upon from time to time to justify the existence of their risk assessment activities/clinic. The chapter by April Levine and Kevin Hughes on cost-effectiveness provides us with ammunition. It provides a blueprint for such analyses and serves as a reference to cite to administrators.

The contributing authors are all acknowledged experts in their respective fields who go to great lengths to present a balanced, unbiased, and nondirective orientation to breast cancer risk management. It is obvious that the authors and the editor took great pains to ensure the accuracy of the factual information presented in this book. The one glaring exception to this is a statement in chapter 11 on Prophylactic Mastectomy claiming that “BRCA2 carriers do not have an increased risk of ovarian disease...” The reference cited for this statement, however, is accurate on the risk of ovarian cancer associated with BRCA2 mutations. There are also numerous typographical errors in the book.

Victor Vogel states as the goal of this book “to educate clinicians in the foundations of risk management for the reduction in breast cancer risk...” It does indeed achieve this goal. The contributing experts take care to elucidate the clinical skills required for breast cancer risk identification and management. The genetic counselor who is intimately involved with patients in a high risk clinic