Familial Breast and Ovarian Cancer

Genetics, Screening and Management

This book surveys the profound and far-reaching ramifications that have arisen from the very significant advances in our understanding of the genetic basis of familial breast and ovarian cancer. Written by international experts from Europe and North America, it provides the busy clinician with a contemporary and wide-ranging guide to the latest developments in the diagnosis, genetics, screening, prevention and management of familial breast cancer. In this rapidly advancing field, this book provides an unrivalled source of information, including sections on ethical and insurance issues and the different cultural aspects of breast cancer. The use of recently devised cancer genetics clinics and different referral criteria and patterns to these clinics are also detailed. This accessible book will be of immense value to all clinical geneticists, oncologists and healthcare professionals involved in screening and counselling programmes.

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To all of the families with hereditary cancer who have worked with us to begin to understand the problem, and for their patience while we search for the answers.

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Foreword

I am very pleased to have been asked to write the Foreword to this important and timely book. As Chair of the Human Genetics Commission I am only too aware of the impact of familial breast cancer, or indeed many other familial cancers, on our work.

The issues raised by an increased understanding of the genetics of breast cancer have formed part of our thinking on how to deal with issues of privacy and confidentiality, such as the provision of genetic information to family members. Moving beyond the clinical, we have also considered some of the issues concerning patenting of gene sequences, taking as one example the continuing debate about the BRCA1 and BRCA2 gene patents. In addition, we have considered familial breast cancer as one of several conditions on the radar of insurance companies before underwriting life or health insurance.

I am therefore pleased to see that a fellow member of the Human Genetics Commission, Professor Patrick Morrison, and his colleagues have so carefully and clearly set out many of these important issues in this book. I hope that it will be widely read by clinicians and those responsible for policy in all of these areas and that they will take note of the important messages herein.

May 2002 **Baroness Helena Kennedy QC**

Preface

Cancer genetics is a new field where medical knowledge is developing rapidly, and there is a continuing need to assess the implications of new research into the genetic aspects of breast and ovarian cancer for clinical management.

Clearly, many individuals have a family history of cancer, but only a small proportion have inherited genes conferring a high risk of developing specific cancers. The development of services to identify individuals at high risk for genetic assessment/testing and management, and to offer those at moderately increased risk appropriate surveillance and follow-up for cancer, is a major organizational challenge which must be shared between clinicians at all levels – from primary care to the specialist geneticist.

Because this field is developing so rapidly, there are scanty up-to-date, concise and accessible sources of information to which interested professionals (whether clinical geneticists, surgeons, oncologists, psychologists or other professionals) can turn. This book has been written to address this.

It is divided into three parts. Part 1 deals with summaries of the molecular biology and natural history of hereditary breast and ovarian cancer. Part 2 examines current screening recommendations, how services have been set up, the characteristics of patients referred, and how services differ in different cultures. Part 3 deals with management of breast and ovarian cancer in mutation carriers and those at high risk, and also includes chapters on ethical, social and insurance issues, psychosocial aspects, and preventative surgery.

We hope this volume will be regularly updated and will be of value to all those involved in cancer genetic screening, counselling and management programmes.

2002 **Patrick J. Morrison**

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