EARLY BREAST CANCER

DETECTION AND TREATMENT

Edited by
H. STEPHEN GALLAGER, M.D.

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H. STEPHEN GALLAGER, M.D.
The University of Texas M. D. Anderson Hospital and Tumor Institute

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Foreword

Although everyone greatly respected his stature in the world of medicine, Wendell G. Scott was the kind of man one naturally called "Scottie," and I shall continue to do so herein. Scottie was a radiologist of eminence, a teacher, an author, an editor, a husband, a father, and a leader of men. To any task in his rich and variegated life, he characteristically brought a dynamic and forceful spirit of great influence. Some of Scottie's philosophy was summed up in his 1964 presidential address to the American Cancer Society:

> The onrushing flood of future possibilities brings with it a spirit of adventure; a need for bold, imaginative thinking, a willingness to gamble on provocative new concepts; the courage to break away from entrenched viewpoints, and the aggressiveness to bring this into reality.

Twenty-five years ago or so, Scottie's leadership contributed to the amalgamation of the St. Louis Division of the American Cancer Society and the Missouri Division, thus strengthening both. In rapid succession, Scottie became a director of the American Cancer Society, chairman of its Medical and Scientific Committee, President (1963-64), Honorary Life Member of its Board of Directors, and recipient of the Annual National Award. He received these last two honors, representing the Society's highest citations for achievement, in 1971.

Of added interest were Scottie's concomitant activities in the Cancer Program of the Federal Government. In the early 1960s, Scottie became a member of the Cancer Control Advisory Committee, of which Dr. Lewis C. Robbins and I were then cochairmen. I well remember the decision to

initiate a nationwide program in mammography. First, the Cancer Control program gave support to the development of a training program for professional and paramedical personnel at M. D. Anderson Hospital and Tumor Institute under Dr. Robert Egan's direction. Subsequently, Dr. John Paul Lindsay and others of the Advisory Committee visited various schools of medicine to ascertain their interest and to encourage their participation in a nationwide mammography training program. The first Conference on Mammography and Diseases of the Breast was held in Houston in 1960 with Dr. Egan as chairman and possibly 20 radiologists in attendance.

In this earlier Cancer Control Program, then under the Bureau of State Services, Scottie also lent his enthusiastic support to the launching of a program of senior clinical cancer traineeships. These were planned to provide special knowledge of cancer for young physicians in the specialties of radiation therapy, diagnostic radiology, pathology, surgery, and internal medicine. The rest of the story of mammography and traineeships is well known to everyone and needs no elaboration.

Dr. Scott promoted cancer education at all levels, including his editorship of the journal *Cancer*. He also looked beyond the problems of management of the patient with cancer. In the 1969 L. Henry Garland Memorial Lecture, presented at the ninety-eighth Annual Meeting of the California Medical Association, he chose as his topic "New Concepts in Cancer Control —Preventable and Avoidable Cancer." In this he directed attention to prevention, a challenge even greater than that of early diagnosis, treatment, and rehabilitation. Agreeing with the remarks of Sir Alexander Haddow at the Ninth International Cancer Congress that "the majority of human cancers are avoidable," Dr. Scott concluded the Garland lecture with the following words:

> While we are awaiting the final solution of the cancer enigma that will come from further basic research, great efforts are justified for the full development of programs on avoidable and preventable cancers and those arising from personal indifference. For the past two decades the great emphasis has been on furthering cancer research, and rightly so. The time has now come to direct emphasis to the prevention and avoidance of cancer and to teach people that cancers can arise from self-neglect.

Ever ready to assist the national effort in its war on cancer, Scottie gave unstintingly of his time to congressional hearings and to the efforts that culminated in enactment of the National Cancer Act of 1971. Later, he was chosen to serve as one of the first members of the enlarged and reconstituted National Advisory Cancer Board.

Scottie's commitment to the nation was exemplified by his service during World War II. He later continued in the active reserve as Consultant to the Surgeon General and retired with the well-deserved rank of Rear Admiral.

As a firm believer in voluntarism, Scottie served as a member of the Council on Voluntary Health Agencies of the American Medical Association.

Scottie was a Chancellor of the American College of Radiology and a liaison member of the Cancer Commission of the American College of Surgeons. In this latter role he was a key member from 1967 through 1971 of the "Cole Committee" on Guidelines for Care of the Cancer Patient and was author of the chapter on diagnostic radiology in its report published in January 1971.

The wide scope of activities and the significant accomplishments of this exceptional man were made possible in no small degree by the intense interest and devoted support of his constant partner and wife, Ella. She rarely failed to accompany him to meetings such as mammography conferences, the meetings of the American Cancer Society, and the annual meetings of the American College of Radiology. Today she carries forward the torch of many activities that were close to Scottie.

Establishment by Washington University of the Wendell G. Scott Lectureship Fund in the spring of 1972 was an honor Scottie cherished highly. With much anticipation he looked forward to attendance at the May 18 dinner at which the Lectureship was to be formally announced and his portrait by Fred Conway unveiled. Fate decreed otherwise. His career was terminated cruelly by cancer on May 3, 1972.

Wendell G. Scott contributed much to the welfare and health of the people of the United States and played a leading role in advancing cancer education and in supporting research and cancer control. Because of his dedicated efforts on behalf of the development of mammography, it is appropriate that this volume is dedicated to him.

DAVID A. WOOD, M.D.

Introduction

The first of these annual conferences on breast cancer was held in 1961 and although 13 years does not seem long, much has happened since that time. Techniques have been improved, new types of equipment provided. A multidisciplinary approach has evolved, bringing together pathologists, diagnostic radiologists, radiation therapists, surgeons, internists, medical oncologists, obstetricians and gynecologists, geneticists, and others. Many radiologists and technologists have been trained in thermography, mammography, and xeroradiography; and a better understanding of the diagnosis and management of the patient with breast cancer has emerged.

The American College of Radiology breast program under the leadership of Wendell G. Scott, M.D. deserves great credit for having stimulated the development of xeroradiography, for encouraging training, and for emphasizing the importance of multidisciplinary cooperation in breast cancer control.

Today, every physician is bombarded with statistics that attempt to portray one method of therapy as superior to another. Continued publication of reports of experience will accomplish nothing unless *new* methods of diagnosis or treatment are presented. Best of all would be the determination of how to prevent breast cancer. The prognostic significance of the tumor type, of the stage of the disease, of the size of the cancer and its location, of its nuclear grade, of the degree of lymph node reactivity and of lymphoid infiltration in breast cancer must be considered. Careful attention must be directed to the other breast, since the same stimulus that caused the breast cancer affects all the mammary tissue.

A volunteer organization such as the American Cancer Society has great potential in the eventual control of cancer. This organization has the capacity to act quickly, independently, and with flexibility. For example, because breast cancer is the most prevalent cancer in women (90,000 new cases will be diagnosed in 1974 and there will be 33,000 deaths), in September 1971 it was decided that a program to combat this disease should be initiated by the Society. Within six months, the Society developed, implemented, and partially funded a major program to diagnose breast cancer at the earliest possible stage.

The earlier diagnosis of breast cancer can now be achieved by a combination of clinical examination, thermography, and mammography or xeroradiography. Public education programs and professional education programs are being expanded. Training programs for radiologists and technologists in the use of the newer techniques are being encouraged. More important, the American Cancer Society is cosponsoring with the National Cancer Institute 27 Breast Cancer Detection Projects, each to screen annually 5000 asymptomatic women over 35 years of age. Women participating will be taught breast self-examination. Many radiologists and technologists will receive training in thermography, mammography, or xeroradiography. This program is an excellent example of the potential of cooperative endeavor between a voluntary organization and the Federal government.

The American Cancer Society is delighted to be a cosponsor of this annual conference with the American College of Radiology and the National Cancer Institute. I know of no other conference on a continuing basis that has done so much for the control of breast cancer.

JUSTIN J. STEIN, M.D.

Preface

The papers in this volume were originally presented at the Thirteenth Annual Conference on Detection and Treatment of Early Breast Cancer in March 1974. Some were submitted as formal manuscripts, others were reconstructed from verbatim transcripts of the proceedings. Each presentation has been edited to reduce repetition and to emphasize the author's major points. By this procedure it has been possible to organize a large volume of diverse information into a compact, concise unit.

Much of the actual work involved in this process was done by my wife and favorite collaborator, Bette W. Gallager. It was she who reduced the hundreds of pages of the transcript to workable size and who patiently typed and retyped each chapter through its numerous revisions. She also assumed responsibility for the preparation of the manuscript for the publisher, corrected the proofs, and prepared the index. Her skill, her tireless effort, and her enthusiasm for the task have made my part of it easy.

Thanks are due to the Committee on Mammography and Diseases of the Breast of the American College of Radiology, who arranged the conference and to the American Cancer Society (Grant M.G. No. 176A) and the National Cancer Institute (Contract NC1-CN-55217), whose grants supported it financially. Particularly deserving of recognition is Robert W. Harrington, Ph.D., Director of Education of the American College of Radiology, without whose skillful management the conference would never have taken place, and without whose energetic support this book would never have been completed.

Houston, Texas
July 1975

H. Stephen Gallager, M.D.

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