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Head and Neck Cancer

Basic and Clinical Aspects

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Library of Congress Cataloging-in-Publication Data

Head and neck cancer: basic and clinical aspects/edited by Waun Ki Hong,
Randal S. Weber.

p. cm. — (Cancer treatment and research; CTAR 74)

Includes bibliographical references and index.

ISBN 978-1-4613-5837-4 ISBN 978-1-4615-2023-8 (eBook)

DOI 10.1007/978-1-4615-2023-8

1. Head — Cancer. 2. Neck — Cancer. I. Hong, Waun
Ki. II. Weber, Randal S. III. Series: Cancer treatment and research;
v. 74.

[DNLM: 1. Head and Neck Neoplasms. W1 CA693 v. 74 1994/
WE 707 H43173 1994]

RC280.H4H3848 1994

616.99'491 — dc20

DNLM/DLC

for Library of Congress

94-27497

CIP

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Originally published by Kluwer Academic Publishers in 1995

Softcover reprint of the hardcover 1st edition 1995

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Printed on acid-free paper.

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Preface

Throughout the world, head and neck cancer is a major threat to public health and a significant challenge to both clinicians and basic scientists. Despite extensive efforts in primary prevention, screening, early detection, and therapy, long-term survival rates have not improved substantially in the last three decades. This book covers a wide range of exciting new findings in both clinical and basic sciences as they are relevant to head and neck cancer. These findings have recently enhanced our understanding of head and neck carcinogenesis at the genetic and molecular levels, offering the promise of improved preventive and therapeutic strategies. This book will also present information on the important clinical advances that have been made in chemoprevention, organ preservation, and the simultaneous use of chemotherapy and radiotherapy.

The first part provides an overview of the etiology and biology of head and neck cancer, including an examination of human papillomaviruses in both benign and malignant lesions. This section also discusses the carcinogenic process at the genetic and molecular levels, as well as aberrant squamous differentiation; increased understanding of these areas has great potential to translate into new strategies for cancer prevention. The second part describes recent advances in developing a risk model for head and neck cancer, as well as the application of genetic susceptibility data in chemoprevention. This section also includes overviews of the status of chemoprevention trials and of the process of invasion and metastasis in head and neck cancer.

The third part covers molecular studies of radioresistance, early detection of head and neck cancer, and the implications of photodynamic therapy, while the fourth section includes studies of the timing and sequencing of chemoradiotherapy. New strategies in this area have significantly increased the feasibility of laryngeal preservation in the treatment of advanced laryngeal cancer. The fifth and last part discusses the management of clinically negative neck disease, the role of adjuvant therapy in preventing distant metastasis, and new strategies for the treatment of recurrent tumors. Finally, we close with some intriguing predictions for the future of head and neck cancer therapy.

Our goal is to provide a summary of the state of the art in head and neck cancer, so that practicing physicians can determine how these findings will influence the management of their patients. The participation of the many specialties represented by the authors emphasizes the importance of multi-disciplinary care for the head and neck cancer patient.

WAUN KI HONG
RANDAL S. WEBER

Acknowledgments

The editors would like to express their deep appreciation to the authors for submitting their manuscripts in a timely manner. We would also like to thank Arianne O'Loughlin for her efforts in editing the manuscripts and making this project a success.

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