

# Cancers of the Head and Neck

# Cancer Treatment and Research

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# Cancers of the Head and Neck

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and Chemotherapy

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# Cancer Treatment and Research

## Foreword

Where do you begin to look for a recent, authoritative article on the diagnosis or management of a particular malignancy? The few general oncology textbooks are generally out of date. Single papers in specialized journals are informative but seldom comprehensive; these are more often preliminary reports on a very limited number of patients. Certain general journals frequently publish good indepth reviews of cancer topics, and published symposium lectures are often the best overviews available. Unfortunately, these reviews and supplements appear sporadically, and the reader can never be sure when a topic of special interest will be covered.

*Cancer Treatment and Research* is a series of authoritative volumes which aim to meet this need. It is an attempt to establish a critical mass of oncology literature covering virtually all oncology topics, revised frequently to keep the coverage up to date, easily available on a single library shelf or by a single personal subscription.

We have approached the problem in the following fashion. First, by dividing the oncology literature into specific subdivisions such as lung cancer, genitourinary cancer, pediatric oncology, etc. Second, by asking eminent authorities in each of these areas to edit a volume on the specific topic on an annual or biannual basis. Each topic and tumor type is covered in a volume appearing frequently and predictably, discussing current diagnosis, staging, markers, all forms of treatment modalities, basic biology, and more.

In *Cancer Treatment and Research*, we have an outstanding group of editors, each having made a major commitment to bring to this new series the very best literature in his or her field. Martinus Nijhoff Publishers has made an equally major commitment to the rapid publication of high quality books, and worldwide distribution.

Where can you go find quickly a recent authoritative article on any major oncology problem? We hope that *Cancer Treatment and Research* provides an answer.

WILLIAM L. MCGUIRE  
Series Editor

## Preface

Cancers of the head and neck are among the most morbid of cancers. Conventional surgery and/or radiation therapy have a high cure rate for patients with early stage disease. However, despite optimal treatment with surgery and radiotherapy, patients with nodal spread or extensive local disease have a low cure rate. Even if a cancer is cured, a patient is often left with long-term debilities from the treatment and/or cancer. The major causes for decreased survival in patients with advanced head and neck cancer include local recurrence, distant metastases, and second primaries. All of these need to be addressed if one is to improve upon the curability of advanced disease.

There are several new techniques, surgical and radiotherapeutic, designed to improve local control. Brachytherapy, or interstitial implantation, delivers a high dose of localized radiation with minimal normal tissue injury. This technique as discussed by Goffinet, may be even more efficacious when combined with hyperthermia. New, creative methods of radiation therapy delivery, such as the use of multiple fractions per day, as discussed by Parsons and Million, are also contributing to long-term local control. Laser therapy, discussed by Ossoff and Nemeroff, provides another tool for treatment of local disease.

In order to achieve an optimal treatment plan, the head and neck surgeon needs as much information as possible concerning the local extent of disease and prognostic factors which may influence outcome. Nuclear magnetic resonance, as discussed by Helsper, Bradley and Kortman, vastly improves the ability to evaluate the spread of disease. We must also seek to identify prognostic factors, such as extracapsular spread, as noted by Johnson and Myers, which change the prognosis and may alter our treatment plan.

In attempts to improve curability, chemotherapy has been added to combined modality programs. Although pilot studies have been encouraging, randomized trials have not yet confirmed a role for chemotherapy. However, some large trials, such as the Head and Neck Contracts Group, have suggested future directions for the use of the chemotherapy. The effectiveness of chemotherapy is in part dependent on the drug selection, dose, and timing of chemotherapy. Dr. Al-Sar-



raf addresses the issue of timing of chemotherapy as part of multimodality treatment in this volume.

Biologic modifiers and immunotherapy may in the future play a role in the control of this disease. Dr. Schuller addresses the role of the cervical lymphatic system in the immunologic reaction to cancer and the future of immunotherapy in the treatment of this disease. Biologic modifiers, such as interferon, are just beginning to be tested in head and neck cancer, and Connors and Jacobs describe their experience and that of others in the treatment of nasopharynx cancer.

For all head and neck oncologists, the goal of treatment is to eliminate the cancer, but with the least complex procedure and the best cosmetic and functional result. There are many innovative and creative new techniques geared to improve the quality of life for head and neck cancer patients. Dr. Cummings' chapter in this volume discusses the various procedures for mandibular reconstruction which afford optimal cosmesis while best maintaining the functions of mastication and articulation. The question of the necessity for a radical neck dissection continues to be debated, and Dr. Myers discusses those situations in which a modified neck dissection is appropriate. There are increased numbers of techniques for conservation laryngeal surgery, and Drs. Bailey and Stiernberg discuss the indications and results of these procedures. Innovative techniques in head and neck surgery increase patient options, but each case must be individualized.

Of course, it would be ideal to prevent head and neck cancer so that the above issues do not need to be addressed. Retinoids have been utilized to treat preneoplastic lesions, and Drs. Lotan, Stimson, Schantz and Hong discuss their potential role in chemoprevention.

The head and neck surgeon, radiotherapist and oncologist primarily treat squamous cell cancers, but increasingly are called upon to manage other cancers of the head and neck. The management of rhabdomyosarcoma has changed substantially in the last few years with improvement in the previously dismal prognosis. These advances are a result of the multimodality treatment of a large research group. New information concerning the etiology, evaluation, histologic subtypes and recommended treatment of rhabdomyosarcoma is presented in this volume by Drs. Wharam and Maurer. Likewise, the head and neck surgeon is often called upon to manage cutaneous melanomas, and there have been many advances in knowledge of the epidemiology, differential diagnosis, staging, and treatment as discussed by Drs. Fisher, Gillespie, Seigler, and Crocker. The head and neck surgeon may be first to evaluate a patient with a head and neck lymphoma, and it is imperative to understand the new staging systems and therapy for this disease.

Many of the innovative approaches in head and neck cancer will come from the laboratory or from pilot studies. However, randomized trials will be necessary to establish the superiority of any new approach over standard therapy. For combined modality programs, it is crucial to have a closely coordinated team of surgeons, radiation therapists, and oncologists. There are many biostatistical pitfalls

in the design and analysis of head and neck clinical trials, and Dr. Makuch and Johnson discuss methods to avoid these.

This current volume of head and neck oncology demonstrates marked progress in the treatment of head and neck cancer. There are several new, exciting approaches on the threshold of development. The current status of our management of this disease continues to serve as a stimulus for basic science and clinical research.

Charlotte Jacobs

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