

# American Head and Neck Society Presidential Address: Head and Neck Surgery in a New Era of Therapeutic Potential



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**T**WENTY YEARS HAVE GONE by since the first International Conference on Head and Neck Cancer. We have seen some significant changes. Modern technology has vastly expanded our diagnostic and therapeutic armamentarium. With these innovations come many new opportunities and obligations. Today, I will speak not so much about the opportunities but about the obligations we have to our patients and to ourselves to maximize the benefits available now and in the future on behalf of our patients.

Never before have we been so dependent on multidisciplinary collaboration in providing access to the best in head and neck oncologic services. Let me give a couple of frequently encountered examples. Patients with laryngeal lesions involving the anterior commissure and those with impaired mobility staged T2 are often offered single-modality therapy with either surgery or irradiation. The result in terms of the voice quality is less predictable. The literature suggests that either therapy can cause some hoarseness. The therapeutic choices are, in fact, more complicated.

A frontolateral hemilaryngectomy results in hoarseness. The voice result is often unpredictable and sometimes poor. The same can be said about the use of supercrucoid techniques. The aggregate experience in centers in which these techniques are used has determined that effective local control can be established in 90% to 95% of patients and that laryngectomy is rarely needed. A patient with a T2 or anterior commissure lesion could be treated with external beam radiotherapy. As a single modality, radiotherapy can be expected to control only 70% to 80% of cases involving T2 disease. History tells us that the vast majority of patients in whom this treatment fails will subsequently undergo a total

laryngectomy. How do we decide what is best?

Now, let me use the example of patients with advanced laryngeal cancer. We have seen a phenomenal change in the treatment paradigm that has been offered to these patients in the last 5 years. The widely acclaimed Veterans Administration Larynx Study suggested that the combination of chemotherapy and irradiation resulted in a rate of disease control similar to that of surgery and postoperative irradiation in the management of stage III laryngeal cancer. In the ensuing years, more data have been collected that indicate that a concurrent combination of chemotherapy and radiotherapy is more effective than sequential chemotherapy followed by irradiation or conventional irradiation alone. We have rapidly entered the era of so-called organ preservation. The problem, of course, is that the avoidance of surgery is not an end in and of itself. The avoidance of surgery has failed to preserve function in a significant proportion of our patients.

A Radiation Therapy Oncology Group study in which the results of concurrent chemoradiotherapy were reported suggests that 23% of patients have significant treatment-related adverse effects; 3% never swallowed again.<sup>1</sup> The intense diffuse ulcerative hypopharyngeal mucositis has resulted in pharyngeal stenosis or obstruction in many patients. Further studies are urgently needed to evaluate methods to reduce or prevent stenosis.

The decision to embark on a nonsurgical treatment plan, including chemoradiotherapy, is important and must be carefully thought out. Organ preservation in circumstances in which the organ has already been destroyed by cancer is clearly an oxymoron. There are circumstances in which organ removal and reconstruction followed by adjuvant therapy may represent the best therapeutic alternative in terms of both disease control and function.

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We have entered a new era in the evolution of the head and neck oncologist. Once again, it is clear that the various roles of surgeon, radiation oncologist, and medical oncologist must be reviewed and revised. Who exactly is responsible for the pretreatment assessment and therapeutic decision making that are necessary to provide the best prospect of optimal results for our patients? How should these patients be treated during therapy to promote good nutrition and continuing function? What exactly is the obligation of each of the various disciplines involved during the posttreatment surveillance phases? Ladies and gentlemen, we must speak clearly and synergize more effectively on behalf of our patients. We need to collaborate on surveillance and rehabilitation to offer maximal functional recovery. We need to work together to promote early detection of recurrence and early intervention for treatment failures.

Perhaps you have heard me in prior appeals for increased research in our field. It is apparent that such research is critically important to head and neck surgical oncology. We need to establish the efficacy and safety of the therapies we prescribe. The standards for clinical information have gradually changed. Prospectively collected multi-institutional data have clear power over single-institutional retrospective reports. Our colleagues in radiation and medical oncology are clearly ahead of the surgical world in this regard. Accordingly, it is appropriate to ask ourselves what the impediments to research are for us today. I think that these impediments can be identified as being primarily time, money, energy, and commitment.

Health care has certainly evolved during my lifetime. Physicians are doing more patient care with less reimbursement. Every head and neck surgeon is struggling to make ends meet. The trade-off sometimes results in increasing patient care activities at the expense of research. Ladies and gentlemen, we need to find the energy to participate. We must use this energy effectively. We must identify the high-profile research questions. We must seek extramural funding to support the process needed to answer these questions. We must be committed to the importance of this pursuit.

As a group, we as head and neck surgeons have failed to provide the kinds of multi-institutional prospectively

collected randomized data currently prized as evidence in our evidence-based world. We as surgeons have let ourselves down and potentially let our patients down because we have failed to keep up with the times. I feel as though the progress that has been made in basic science directed toward a better understanding of the biology and pathophysiology of head and neck neoplasia has been phenomenal. Our shortcomings lie in translational research. I speak most directly to the community of clinical otolaryngologists who for the last several decades have allowed themselves to bask in the satisfaction of having established themselves as premier head and neck oncologists. Today, we head and neck surgeons stand at the edge of a precipice that threatens to change the way head and neck surgery is practiced around the world. We must collaborate with our multispecialty team to help select the best patient care available. We must join forces to develop protocols that will answer the pressing therapeutic questions of our time. We must embark on the new world of head and neck oncology with the enthusiasm and vigor of the pioneer surgeons who established head and neck surgery as an independent discipline almost 50 years ago. Ladies and gentlemen, I call upon you all to examine your personal situation, to participate in multidisciplinary discussions of patient care, and to take part in protocol development and data acquisition and assessment. Help us move head and neck surgery forward in this new era of therapeutic potential.

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## REFERENCE

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