IMRT AND ITS ROLE IN HEAD AND NECK CANCER: A SUMMARY
THOMAS YANG, M.D., GOKHAN OZYIGIT, M.D.
K.S. CLIFFORD CHAO, M.D.

Background Information About Head and Neck Cancer
In 2001, head and neck cancers occurred in approximately 40,100 individuals, with death occurring in 11,860 patients. The United States has experienced both decreases in incidence and mortality rates of head and neck cancer over the last twenty years because of decreased cigarette consumption in both men and women. Demographically, significant racial differences exist in the United States in the incidence of head and neck cancer. African-Americans have had higher incidences of these cancers since the 1970s. Although incidences in head and neck cancer have decreased throughout all populations since the 1980s, the mortality rate is significantly higher in blacks. This can be attributed to the fact that African-Americans tend to be diagnosed at a higher tumor stage; further, there is a question of access to care and higher prevalence of smoking in the black population.

Key risk factors in head and neck cancer include tobacco and alcohol use, with cigarette smoking being the single most important risk factor. Tobacco use also entails cigars, pipe smoking, and smokeless tobacco.

The Evolution Of IMRT and Its Role in Head and Neck Cancer
Over the past three decades, the field of radiology has witnessed the development of computed tomography (CT) and magnetic resonance imaging (MRI). These imaging technologies have provided physicians with a three-dimensional view of numerous patients' cancer anatomy. This has enabled radiation oncologists to accurately define tumor volumes and their spatial relationship to critical normal structures. Three dimensional CT simulators and radiation treatment planning systems have become commercially available and are increasingly popular in clinics. Furthermore, radiation treatment machines now offer the capability of adjusting beam intensities to accommodate different tumor shapes.

These advances have resulted in the implementation of high precision radiation treatment. Utilizing these techniques, the radiation oncologist can expose the cancer or tumor area to high-dose radiation while minimizing exposure to normal tissue. Three dimensional conformal radiation therapy (3D-CRT), was the first form of external beam radiation therapy. 3D-CRT delivers radiation beams of uniform intensity (or one intensity level only). Intensity Modulated Radiation Therapy (IMRT) represents a major step in the evolution of external beam radiation therapy for the head and neck. In contrast to 3D-CRT, IMRT enables the radiation oncologist to deliver radiation of varying levels of intensity to tumor cells. Thus, IMRT offers greater conformality, or a greater ability to adapt to different tumor shapes.

Increased conformality leads to better sparing of normal tissues. Thus, IMRT becomes a desirable mode of treatment for head and neck cancer because these tumors are often next to critical structures, namely the parotid glands, spinal cord, brain stem, and optic pathway structures. In a prospective study of salivary function sparing head and neck cancer patients, it was demonstrated that salivary flow decreases substantially with increasing dose to the parotids. In another head and neck IMRT study, xerostomia or dry mouth was reduced within 1 year post-treatment when parotid function was spared.

IMRT planning is an image-based virtual simulation. This planning process requires even more stringent delineation of tumor targets and critical structures. Further, IMRT provides dosimetric (dosing) advantages over 3D-CRT. These advantages have been demonstrated in cases of locally advanced nasopharyngeal carcinoma (NPC) using IMRT technique. IMRT can deliver greater than 95% of the prescribed dose to greater than 95% of tumor volume while 3D-CRT delivers less than 89% of this dose to tumor volume. In another NPC study, it was demonstrated that IMRT provided better tumor volume coverage than conventional beam arrangements. For ethmoid sinus tumors (tumors located in the sinuses that are situated in the ethmoid bone alongside the nose), IMRT delivered maximal doses to tumors without compromising vision.

IMRT continued on next page
IMRT continued from previous page

However, drawbacks to head and neck IMRT must be recognized. IMRT is labor intensive and prone to error due to the complexity of planning and delivery when compared to conventional radiotherapy. Although IMRT’s planning, delivery, and quality assurance are maturing, clinical outcomes are currently few. Target determination and delineation, and dose prescription strategies require further refinement in IMRT protocol. Another unresolved concern is the unknown mutagenic or cancer-causing potential of the significantly higher tissue volumes receiving low to moderate radiation dose, and the higher total body, low-dose radiation exposure exerted by IMRT compared with standard technique.

The Importance of Preventing Xerostomia

During the course of radiation therapy in head and neck cancer, xerostomia (dry mouth) is a side effect that may occur. Symptoms include inconvenience in eating and speaking; redness, irritation, and sores in the mouth; difficulty swallowing; changes or loss of taste; and nausea. Although xerostomia and its accompanying symptoms are not life threatening, they present significant problems in the quality of life of patients, namely alteration of eating function and deterioration of oral health. Saliva has antibacterial components; thus any disruption in salivary flow can lead to opportunistic infection. Furthermore, these symptoms may be permanent, illustrating the importance of prevention. As previously described, IMRT’s ability to preserve critical normal tissue such as the parotid glands during the course of radiation treatment make it a modality that can reduce the incidence of xerostomia.

Clinical Outcomes of Head and Neck IMRT

The following are the clinical outcomes on the use of IMRT in head and neck cancer.

Kuppersmith et al demonstrated that by delivering a moderate dose of radiation to the parotid glands by IMRT in 28 patients with head and neck cancer, the incidence of acute toxicity decreased dramatically compared to conventional radiotherapy. Butler et al. likewise reported a complete response with an acceptable level of toxicity in 19 out of 20 head and neck cancer patients using the “Simultaneous Modulated Accelerated Radiation Therapy” (SMART) protocol. SMART uses higher daily doses of radiation to tumor volumes, thus shortening overall treatment time and eliminating the need for multiple daily doses. Van et al followed the progress of 30 postoperative head and neck IMRT patients. With a median follow-up of 24 months, they reported these statistics: 96.7% local control, 83.3% disease-free survival, 93.3% overall survival.

Lee et al. studied 67 head and neck cancer patients treated with IMRT. His conclusions were that: 4 year local progression free survival was 100%; local regional progression-free survival was 97%; distant metastases free survival was 94%; and overall survival was 94%. For NPC, IMRT achieved excellent local-regional control, provided excellent target coverage, and spared salivary glands.

Chao et al. reported the clinical outcome of applying enhanced
IMRT continued from page 2
IMRT in 17 patients with head and neck squamous cell carcinoma. They found that in eleven patients with gross tumor or re-irradiation, complete response was achieved in nine with no severe acute side effects being reported. In a comparative study, Chao et al. reported that IMRT’s dosimetric advantage resulted in significant reduction of late salivary toxicity and xerostomia in oropharyngeal cancer patients as compared with patients treated with conventional techniques. They also observed no compromise in tumor control and survival among patients treated with IMRT. To substantiate their earlier findings, Chao et al. recently reported the patterns of failure in 126 patients with head and neck carcinoma. Two-year locoregional control rate was 85%. No dermal (skin) failure and only one marginal failure in the region adjacent to the spared parotid glands were observed.

Conclusion
Early results with head and neck IMRT have been promising. Compared with 3D-CRT, IMRT offers several advantages. First, it provides better conformality and enables better normal tissue sparing. Further, IMRT offers greater dosimetric advantages exposing neoplasm to tumoricidal doses of radiation compared to conventional radiation therapy. Clinical outcomes with head and neck IMRT have shown decreased rates of side effects and tumor recurrence with increasing long term survival rates.

Another area of intense research is to integrate molecular or functional imaging to characterize specific subtypes of tumor or normal tissue. In the near future “imaging-guided” IMRT may allow us to discriminate tumors that require a higher dose of radiation to be eradicated or define patients in whom a lower radiation dose is justified to avoid excessive toxicity.

Editor’s Note: K.S. Clifford Chao, M.D., is an Associate Professor in the Department of Radiation Oncology at the University of Texas, M.D. Anderson Cancer Center in Houston, Texas. Thomas Yang, M.D. and Gokhan Ozyigit, M.D. are research fellows in the Department of Radiation Oncology at M.D. Anderson Cancer Center.

*************

ORAL CAVITY AND PHARYNX CANCER:
IT’S NOT JUST BLACK AND WHITE
MARY JO DROPKIN, RN, PHD

Oral cavity and pharynx cancer (OCPC), or mouth and throat cancers, may be considered the most debilitating of all cancers. While many other patient populations experience comparable suffering with cancer treatment, several unique physical and emotional needs become more urgent and magnified by visible changes in appearance and multiple functional impairments associated with treatment.

Although the overall occurrence of OCPC represents only 2% of all diagnosed cancers, recent national statistics indicate it ranks in the top 10 leading sites of projected new cases in men. And of 11 racial and ethnic groups investigated by the Department of Epidemiology and Surveillance at the American Cancer Society, African American men have the highest rate of OCPC, at 20.4 per 100,000. Distribution of cases by race and the stage at which the disease is diagnosed, indicates that 38% of OCPC in Whites are diagnosed in the early stages (Stage I/II), and another 50% in Stages III/IV. Whereas only 20% of OCPC are diagnosed early in African Americans, 70% are not diagnosed until Stages III/IV. Not surprisingly, 5-year survival rates are 58% for Whites and 34% for African Americans. This represents more than a 50% increase in mortality rate for oral cavity cancers in African American males, and the incidence continues to rise.

In the general population as well as in the African American population, the older one is, the more likely mouth and throat cancer is to be advanced at the time diagnosis. Subsequently, it is more difficult to treat and survival rates diminish as well. The presence of other illnesses and the tendency to attribute symptoms to the aging process are frequently reasons why the elderly do not seek medical attention until OCPC is in the advanced stages. Other illnesses in turn, such as heart disease, may prevent aggressive curative treatment, which may further contribute to poor prognosis. In the African American population, economic and social barriers to accessing medical treatment further complicate these issues. Additional barriers to early cancer detection in African Americans include lack of knowledge about the increased risk of developing cancer, reluctance to undergo diagnostic procedures, and personal misconceptions about cancer diagnosis and treatment.

One approach to helping or supporting patients through a chronic illness that is being adopted by many nurses in research and clinical practice is a Recovery Model (Scott & Eisendrath, 1986). In this manner, the experience of illness is considered from the time of diagnosis and continues to the end of life, or any portion thereof. The major premise of this perspective is that recovery is a fundamental human process, or an inherent ability to absorb and accommodate change in well-being over time not only to survive, but to thrive. This process is characterized by a changing pattern of accommodations to illness. Although the process of recovery may include some general standards, each person’s recovery is individual and uniquely defined. The model reflects four dimensions of recovery, that is, physical, functional, cognitive and emotional dimensions. Recovery outcomes include renewal and recuperation; they are observable, measurable and sensitive to intervention. A fundamental principle of this model is that despite one’s response to cancer treatment, the quality and course of survival over time are functions of recovery, not of illness alone. Research studies remain scarce, however, with regard to the long-term assessment of recovery.

Consideration of race is particularly important to recovery science at this time. The population of cancer survivors is growing across all racial and ethnic

ORAL continued on page 6

http://www.spohnc.org
E-mail-- info@spohnc.org
A TIME FOR SHARING

As a successful Sales Representative for the past 15 years, I was quite shocked and alarmed to learn that I had been diagnosed with squamous cell carcinoma of the tongue at 36 years of age, never having smoked or used tobacco products of any type, and only occasionally having consumed alcoholic beverages.

A native of Pittsburgh, I attended Penn State University and graduated in May 1987 with a B.S. in Marketing. I went on to pursue a career in sales which introduced me to the check printing industry, contact lens and solution sales, and for 6 years, payroll and human resource software sales. I’ve always been independent, self-motivated and goal oriented. I married at age 25, had my daughter in November 1990 and went on to endure a very unhappy, abusive marriage for the following nine years.

At the turn of the new millennium, I decided to end my marriage and asked my husband to move out. My daughter and I remained in our home, adjusting to our new life and myself, to the new pressures of being a single parent. In this first year apart, the economy began a downward trend and my business started feeling the “crunch” of fewer clients making system changes in light of the dreaded Y2K (an acronym for the Year 2000, aka what’s going to happen to my computer system when the millennium turns?). I began to feel pressure to produce in this unstable environment, but had no outlet for relieving the stress I felt.

I don’t know when I first noticed a small (less than 2 mm) cut on the left side of my tongue, but I felt it. I had a routine dentist appointment in December, and didn’t even mention it. However, in early January 2002, while brushing my teeth, I noticed an irregularly shaped grayish piece of skin on the underside of my tongue. As soon as possible I went to my dentist. He prescribed an oral antibiotic to take for two weeks, but is didn’t help. By now the “ulcer” had become more painful.

I made an appointment to see my ENT on February 6th, 2002. The physician examined me and recommended a biopsy. He removed the grayish “ulcer.” The results of the biopsy indicate negative for malignancy or for any pathology. Something was wrong, however, because the ulcer returned and was vicious. Every two weeks, I returned to the same ENT Practice through April 26th. The tumor specialist on this visit told me it was time to remove the growth, however, he would be out of town for two weeks.

I was still compulsive about having a diagnosis before removing a large portion of my tongue. At that point, I had tried multiple anti-bacterial, fungal, and viral medications. I had consulted with a holistic foods and herbal health expert, and had been eating organic foods since mid-March. I had been given two steroid Rx’s, each lasting for a period of up to 10 days. I had three injections of steroids directly shot into the growth in my tongue. Nothing worked. The growth grew to be the entire left side of my tongue, and I was very afraid of it approaching the tip of my tongue. In all my visits no one ever scheduled a CT Scan of my tongue or any other diagnostic procedures.

In my great wisdom, I thought I was the model of health. I just had this painful lesion on my tongue that had originated from an open cut that had never healed. So, while the good doctor was away, I decided to seek another opinion. I was able to get an appointment with a physician at the Eye and Ear Institute, affiliated with the University of Pittsburgh Medical Center on May 15th. My insurance wasn’t accepted by UPMC, but it would be a small price to pay just to get a worthwhile second opinion.

I explained my history briefly to the doctor. She looked at my tongue, and then she took my hand and said, “Oh, honey.” At this point I knew I had cancer, but I asked her if she was sure. She said she was, but wasn’t definitive about the type. She offered the name of the best surgeon in Pittsburgh, next to herself, since she couldn’t do the surgery, due to the insurance conflict. The doctor she directed me to, coincidentally, is part of the practice I’d been going to for several months. I’d not seen him, but his name was familiar. He was the first doctor who approached my problem scientifically, meaning, he suggested that I have a CT scan that same afternoon. A follow-up biopsy was scheduled for the following Monday.

The biopsy went smoothly and for the first time in about six months, I was pain free. I could talk: it wasn’t perfect, but I wasn’t in pain anymore. I went home, and it wasn’t long before the phone rang. After some small talk, the surgeon told me that the tissue tested positive for squamous cell carcinoma. Ten days later I had major surgery.

My surgery on Thursday, May 30th included a partial hemi-glossectomy, with left neck dissection of 22 nodes, a full thickness skin graft and tracheotomy. In all my life I couldn’t have ever imagined something like this. Two doctors performed the surgery, because the nature of this procedure requires the hands of two skilled physicians. The tumor which had grown to be 2.8 cm long x 1.7 cm wide when measured pathologically, was removed leaving a clear margin of 2 mm good tissue. The tumor was T3/NO/MO which means it was a Stage 3 tumor (based on its size), but had not spread to my lymph nodes and had not metastasized. The skin graft was a procedure whereby skin from my clavical was taken and used to help the elasticity of the left-side of my tongue, and finally, the trach was a precaution, so that in the event that my tongue would swell anytime following the operation, a breathing tube could quickly and easily be inserted for breathing.

On the following Tuesday all three doctors, the two surgeons and my radiation oncologist, visited me throughout the day to share the good news that my lymph nodes were all negative! The managing nurse of the oncology floor at the hospital told me that in 22 years, she had never seen so many doctors visit a single patient in one day. She thought she had a VIP (very important patient) on the floor, and at this point I should mention that I couldn’t have had more love, prayers and support from everyone I knew. My family, co-workers and friends sent cards, flowers and gifts for a couple of months after my operation.

So, I was discharged on June 6th. But, not until I demonstrated that I could talk (distorted though it was), and eat pudding and drink apple juice. I was told that I would enjoy a diet of mainly pureed food for up to...
a month or more. I ached due to an accessory nerve being severed during the surgery, and this caused a good amount of pain in my right shoulder for several months. I basically felt like I had been in a pretty good battle, and got the short end of the stick.

At this point, two things became apparent to me. My speech would never be the same, and secondly, neither would my perspective on life. Initially, I was grateful to learn that my prognosis for long-term survival was very good, especially following my adjuvant care which consisted of 30 intense modulation radiation therapy treatments (IMRT) and 5 chemotherapy sessions; and if my speech was different that was a small price to pay for this much greater reward. I participated in 30 speech therapy sessions, and always felt uplifted afterwards. I can’t tell you how many people I’ve spoken to who say that if I hadn’t told them that I had this procedure, they wouldn’t have known that my speech was any different. But, I know because it so defined who I was. I had perfect diction, articulation and intonation- and I can’t tell you how many days I awake, knowing that I’ll have to speak, and dreading it.

My perspective on life, however, has improved. I’ve become more human through this experience. I’m aware of human pain, and realize that I’m more compassionate towards those who are in pain or are suffering. Prior to my diagnosis, I really had never been sick. I rarely even got a cold; I went from having 35 years of excellent health to having cancer of the tongue. That’s why I painted the detailed picture of those events that led up to my diagnosis. I firmly believe that the combination of stress, in addition to a weakened immune system, combined with lack of exercise (although I was always thin), caused an otherwise normal cell to go bad and start the cancer. And something I may never understand, but is true, is in almost losing my life . . . somehow I regained it.

Today, I’m healed. My slight lip distortion (my lip drooped after my operation because it had been nicked) is no longer there, and my smile has returned. Finally, the shoulder that was painful for so long is all better thanks to Yoga, and some physical therapy. But, much more importantly, my relationship with my daughter is healthy. My daughter, age 13, after the difficult years following my divorce, will tell you she’s happy and she is thriving!

I returned to work in a job-share position as a Major Account Rep for my company in January 2003. I’m there in presence, but mentally, I don’t think after my glimpse with my own mortality or the Enron fiasco, I can fully devote myself to a career aimed solely at increasing shareholder value. I should love my situation; I receive full benefits, am supposed to work only three days a week, and attend a national sales meeting each year held in a tropical paradise; this year, we went to the Bahamas. But, something is missing, and I think it’s the need to feel as though I’m helping someone or making a difference in someone else’s life, like all the medical professionals did for me.

The world is a great big place; and I know this experience changed me. It’s caused me to think about more than just myself; I care about other people, like the soldiers and civilians who are dying in the War in Iraq, so that we can live free from the fear of terror, and so that the Iraqis can live in better conditions. I think about children who are abducted, and people who die terrible deaths, and those who haven’t died, but live with such a poor quality of life, that some probably wish they were dead. How do we ever make sense of it all? Why do we have to be brought to a point of such pain in our own lives, so that we can begin to see things more clearly?

I’m thinking about going back to school. After much consideration I’ve begun the process of applying to the University of Pittsburgh, and Chatham College’s Master of Occupational Therapy programs. I have my application, the requested letters of recommendation, my transcripts from Penn State, and my date scheduled to take the GRE exam. I have no idea what’s led me to this point or how I’ll

Kimberley Thomas
Gibsonia, PA

---

Helping to Raise Awareness of Oral and Head and Neck Cancer

1-9 pins: $6.50 each
10 or more pins: $6.00 each
including shipping and handling

"We Have Walked In Your Shoes"
a three part resource for Oral and Head and Neck Cancer Patients and their families

To order
Call 1-800-377-0928
Visa, Mastercard and American Express accepted by phone and mail
Visa and Mastercard accepted at www.spohnc.org

SPOHNCC
P.O. Box 53
Locust Valley, NY 11560-0053
1-800-377-0928
ORAL continued from page 3

categories. Yet to date, the literature consists largely of studies that examine information obtained on only one occasion, rather than on many occasions over time. Change over time is inherent to the recovery process. Subsequently the quality and nature of physical resilience, functional status or social network, perception of events, and regulation of emotion are not only affected by the disease and its treatment, but, in turn, affect the course of illness as well. There is a growing body of literature that is documenting significant differences in these variables between African Americans and European Americans. Therefore, the recovery process may be substantially different in these two groups.

Recovery Issues for OCPC Patients:  It is becoming increasingly apparent that the recovery process not only influences the course and longevity of OCPC, but the response to treatment as well. Despite the many debilitating side effects that are experienced across cultures with this illness, there are few studies that specifically describes the recovery process for OCPC patients as treatment and recovery occur over time.

In general, African and European Americans have been shown to differ on a number of measures that would seem likely to influence recovery trajectories. Within the physical dimension, African Americans seem to be more resilient and are able to perform activities of daily living under conditions of impaired health more readily than European Americans. There is also considerable cultural variation in social networks and social support between the two groups according to some studies. For example, African Americans differ from European Americans in terms of the values and beliefs associated with caregiving and support, with African Americans placing greater value on family in the social network. Similarly, these two groups differ with respect to the social support systems that they use. Although the social networks of African Americans tend to be smaller, these networks tend to contain more family members, and there seems to be more contact with the network. Research has consistently shown that both participation in religious practices and subjective religiosity are greater among African Americans. Compared to European American respondents, African Americans have reported higher levels of religious behaviors, both public and private, and more positive attitudes about the strength of their personal religious commitment. In relation to the cognitive aspect of recovery, recent research indicates that religious coping may be of particular importance to, and for, African Americans in comparison to European Americans. For example, in analyzing the results of several studies focused on ethnic differences in caregivers of people with dementia, it was found that African American caregivers were generally more likely to use prayer, faith, or religion as a coping strategy and to seek help from clergy members. In contrast, European American caregivers were more likely to use support groups and help from health professionals as coping strategies. Finally, with regard to the emotional dimension of recovery, African Americans are more emotionally inhibited than Europeans and have a documented reluctance to express feelings about themselves.

As even this brief review makes clear, there is considerable ethnic variation along the four dimensions with the potential to impact recovery from OCPC. In considering differences between ethnic groups, it is important for healthcare professionals to realize who individual patients are, including their ethnic background – what makes them who they are - not simply the color of their skin. With increasing research and a better understanding of the impact of healthcare on ethnically diverse populations, acceptance of care and accommodation of interventions and treatment will make recovery outcomes more predictable.

Editor’s Note: Mary Jo Dropkin, R.N., PhD., is Associate Professor at Long Island University School of Nursing, Brooklyn, NY.

New Hope for People with Swallowing Problems

Melinda Judd, M.S. CCCSLP

In December of 2002, the FDA approved an electrical stimulation device to be used in an active rehabilitation program to help people with swallowing disorders. This device, VitalStim, is specifically designed for the rehabilitation of patients who suffer from dysphagia as a result of a number of diagnoses including stroke, progressive neurological disease, and the side effects of head and neck cancer treatments.

Many patients who have been feeding tube dependent for a year or more, have experienced improvement using the VitalStim treatment approach. Even several months to years after traditional therapy has been abandoned, patients may experience improvement in swallowing. Some patients have shown dramatic improvement in only six to twenty daily sessions.

This new therapy uses small electrodes placed on the throat area to stimulate key swallowing muscles. Working with a clinician, patients undergo an active therapy program to create or re-learn functional muscle use patterns necessary to initiate or re-establish swallowing.

VitalStim therapy is administered by a medical practitioner, usually a Speech Language Pathologist certified in this rehabilitation approach. For more information about this new therapy, please visit www.vitalstimtherapy.com. Or call 1-800-477-6920.

Editor’s Note: Ms. Melinda Judd is a Speech Language Pathologist in Dallas, Texas. She is currently employed at Life Care Hospital where she has used the VitalStim therapy approach successfully with many of her clients.

COMMENT: In our March issue of News From SPOHNC. Yorick Wijting, PT and Marcy L Freed, MA, SLP will discuss the electrical stimulation, how it was developed for people with swallowing problems, and how it may help oral and head and neck cancer patients.

http://www.spohnc.org
E-mail-- info@spohnc.org
New Standard for Voice Saving Care of Larynx Cancer Patients

Philadelphia - Results of an RTOG national clinical trial confirm that simultaneous treatment with chemotherapy and radiation preserves the voice of patients with advanced larynx cancer without compromising survival rates. The findings, reported in the November 27, 2003 issue of the New England Journal of Medicine are compelling enough to have the combination treatment become the standard of care for such patients, the study’s authors report.

“Chemotherapy and radiation together are recommended for advanced laryngeal cancer patients who are otherwise in good health and want to preserve their voice,” says RTOG Study Arlene Forastiere, M.D., professor of oncology and otolaryngology at the Johns Hopkins Kimmel Cancer Center. “For patients who have other significant medical problems or little support at home, we would recommend radiation alone. In all cases, patients should be followed closely during treatment by a head and neck surgeon, so that surgery can be performed if there is residual or recurrent cancer after treatment.”

This year, approximately 9,500 Americans will be diagnosed with laryngeal cancer and 3,800 will die from the disease.

Experience with combined treatment, Forastiere adds, has reduced the need for complete removal of the larynx from 100 percent to about 15 percent. Removing the larynx leaves patients unable to speak with their natural voice and typically use speaking aids such as an electronic device. Other previously-studied treatment options included radiation therapy alone or several cycles of chemotherapy followed by radiation. Studies from a decade ago showed that the survival rate of patients treated with chemotherapy followed by radiation was just as good as those receiving surgery.

“RTOG clinical trial research is once again determining the standard of care for cancer patients, said Walter J. Curran, Jr., M.D., RTOG Group Chair and Clinical Director of the Kimmel Cancer Center at Thomas Jefferson University. “Our 30 years experience in head and neck cancer research has put us at the forefront of multi-modality oncology research.”

This new study of 547 patients entered on RTOG 9111 shows that giving chemotherapy with radiation at the same time makes cancer cells more susceptible to radiation, so effectively more tumor cells are destroyed,” explains Forastiere.

The national study was the coordinated by the RTOG, with participation from its member institutions and members of the Southwest Oncology Group (SWOG) and the Eastern Cooperative Oncology Group (ECOG). The study was funded by the National Cancer Institute.

Study authors included Helmuth Goepfert, M.D., Moshe Maor, M.D., Randal Weber, M.D., William Morrison, M.D., Bonnie Glisson, M.D., from the University of Texas M.D. Anderson Cancer Center; Thomas F. Pajak, Ph.D., from the RTOG; Andy Trotti, M.D., from the H. Lee Moffitt Cancer Center and Research Institute; John A. Ridge, M.D., Ph.D., from the Fox Chase Cancer Center; Glen Peters, M.D., from the University of Alabama; Andrea Leaf, M.D., from the New York Harbor Healthcare System; John Ensley, M.D., from the Karmanos Cancer Institute at Wayne State University School of Medicine; Jay Cooper, M.D., from New York University Medical Center and Ding-Jen Lee, M.D., Ph.D., from the Johns Hopkins Kimmel Cancer Center.

RTOG is a multi-institutional national clinical cooperative group funded by the National Cancer Institute and headquartered in the Philadelphia office of the American College of Radiology. RTOG has over 30 years of experience in conducting clinical trials and is comprised of 250 of the major research institutions nationally and in Canada. The group currently has more than 40 active studies that involve radiation therapy alone or in conjunction with surgery and/or chemotherapeutic drugs or which investigate quality of life issues and their effects on the cancer patient.
Support for People with Oral and Head and Neck Cancer (SPONHC)

SUPPORT FOR PEOPLE WITH ORAL AND HEAD AND NECK CANCER
SPONHC, Inc.
P. O. Box 53
LOCUST VALLEY, NY 11560-0053

“New Treatments for Head and Neck Cancer”
(a teleconference)

Listen to a multidisciplinary approach to the treatment of head and neck cancer addressing: diagnosis, staging, treatment decisions, surgical interventions, developments in radiation oncology, chemotherapy options, clinical trials, quality-of-life concerns.

Summary of Teleconference to appear in March newsletter