Frequent post-treatment follow-up by advance practice nurses improves care for high-risk head and neck cancer patients
Better symptom management results in fewer emergency room visits and hospital admissions

San Antonio, October 19, 2015— For high-risk patients who receive chemoradiation therapy for head and neck cancer, frequent follow-up appointments conducted by advance practice nurses (APN) in a clinical outpatient setting allowed for more intensive symptom management, resulting in fewer post-treatment emergency room visits and hospital admissions compared to historical outcomes, according to research presented today at the American Society for Radiation Oncology’s (ASTRO’s) 57th Annual Meeting.

Treatments such as radiation therapy (RT) and chemoradiation therapy (CRT) for patients with head and neck cancer can cause side-effects, including short- and long-term pain or difficulty swallowing, tooth decay, bone pain, nausea, fatigue, mouth sores and/or sore throat, resulting in infection risks and complications that may require unplanned emergency room visits or hospital admissions in the immediate post-treatment months.

APNs have post-graduate education in nursing, often in a specific role and/or patient population, allowing them to diagnose and treat illnesses and to prescribe medication.
This study compared the incidence of adverse events (i.e. unplanned emergency room visits and hospital admissions) in 25 high-risk head and neck cancer patients who received post-treatment care at an APN-led, acute-rehabilitation-focused clinic to the incidence of adverse events of 24 head and neck cancer patients who received standard follow-up treatment. The standard follow-up group patients were identified using an approved institutional review board database.

Patients were considered high risk if they had limited social support, resided in a nursing home, required multiple hydrations during treatment, received a second course of stereotactic body radiation therapy (SBRT), and/or had a feeding tube.

Of the 49 total patients included in the study, 90 percent had stage IV or recurrent cancer. All patients were treated with intensity-modulated radiation therapy (IMRT) or SBRT techniques. RT alone was given to 22 patients (45 percent) and the other 27 patients (55 percent) received radiation therapy with concurrent chemotherapy using either cisplatin or cetuximab.

Compared to patients in the standard follow-up group, patients in the APN clinic group (APNCG) were seen twice as often (1.2 versus 2.0 visits), with the standard follow-up group being seen at four to six weeks post-treatment, then at three months post-treatment, while the APNCG patients were seen at two to four weeks post-treatment and every two to four weeks thereafter until symptoms stabilized.

Of the 49 patients studied, 18 experienced adverse events a total of 26 times. Of those 18 who visited the emergency room or were admitted to the hospital, six (33 percent) were receiving frequent follow-up through the APN-led clinic. Patients who were treated with RT alone who were in the APNCG had the most significant decrease in complications with only 16.7 percent experiencing adverse effects versus 60 percent in the standard follow up group. No difference was found in the patients treated with CRT, due to the intensive post-RT follow-up also provided by medical oncology.

“This study illustrates an important role for APNs in radiation oncology,” said lead study author Bridgett Harr, CNP, Department of Radiation Oncology at Cleveland Clinic. “[APNs] are in a unique position to provide more intensive follow-up care, allowing them to better manage the post-
treatment symptoms of high-risk head and neck cancer patients. Not only is there greater patient satisfaction when being managed in an outpatient setting, it is more cost-effective to avoid emergency room or hospital admissions. The APN’s ability to provide high-quality, cost-effective care will play an increasingly vital role in the future of radiation oncology and health care.”

The abstract, “Advanced Practice Nurse Follow-up Clinic Reduces Emergency Room Visits and Admissions in High-Risk Patients after Chemoradiation Therapy for Head and Neck Cancer” will be presented in a poster presentation at ASTRO’s 57th Annual Meeting at 5:30 p.m. Central time on Monday, October 19, 2015.

To speak with Ms. Harr, please call ASTRO’s Press Office, at the Henry B. González Convention Center in San Antonio on October 18-21, 2015 at 210-258-8104 or 210-258-8105, or email press@astro.org.

ASTRO’s 57th Annual Meeting, being held at the Henry B. González Convention Center in San Antonio, October 18-21, 2015, is the nation’s premier scientific meeting in radiation oncology. The 2015 Annual Meeting is expected to attract more than 11,000 attendees including oncologists from all disciplines, medical physicists, dosimetrists, radiation therapists, radiation oncology nurses and nurse practitioners, biologists, physician assistants, practice administrators, industry representatives and other health care professionals from around the world. Led by ASTRO President Bruce D. Minsky, MD, FASTRO, a radiation oncologist specializing in gastrointestinal cancers, Professor of Radiation Oncology, and the Frank T. McGraw Memorial Chair at The University of Texas MD Anderson Cancer Center, Houston, the theme of the 2015 Meeting is “Technology Meets Patient Care.” Dr. Minsky’s Presidential Symposium, “Multidisciplinary Management of Esophageal and Rectal Cancers,” will feature Leonard L. Gunderson, MD, MS, FASTRO, and Joel E. Tepper, MD, FASTRO, to highlight imaging, staging, genomics and data mining approaches, as well as the latest advances in esophageal and colorectal cancer treatment. ASTRO’s four-day scientific meeting includes presentation of more than 2,100 abstracts: five plenary papers, 351 oral presentations, 1,609 posters and 171 digital posters in more than 53 educational sessions and 26 scientific panels for 20 disease-site tracks. Three keynote speakers will address a range of topics including cancer biology in
radiation oncology, the essential roles of a physician, and patient safety: Arul Chinnaiyan, MD, PhD, Professor and Director, Michigan Center for Translational Pathology; Francisco G. Cigarroa, MD, Past President and Chancellor, University of Texas; and Gerald B. Hickson, MD, Senior Vice President and Assistant Vice Chancellor, Vanderbilt University Medical Center.

ABOUT ASTRO

ASTRO is the premier radiation oncology society in the world, with more than 10,000 members who are physicians, nurses, biologists, physicists, radiation therapists, dosimetrists and other health care professionals who specialize in treating patients with radiation therapies. As the leading organization in radiation oncology, the Society is dedicated to improving patient care through professional education and training, support for clinical practice and health policy standards, advancement of science and research, and advocacy. ASTRO publishes three medical journals, International Journal of Radiation Oncology • Biology • Physics (www.redjournal.org), Practical Radiation Oncology (www.practicalradonc.org), and Advances in Radiation Oncology (www.advancesradonc.org); developed and maintains an extensive patient website, www.rtanswers.org; and created the Radiation Oncology Institute (www.roinstitute.org), a non-profit foundation to support research and education efforts around the world that enhance and confirm the critical role of radiation therapy in improving cancer treatment. To learn more about ASTRO, visit www.astro.org.

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Advanced Practice Nurse, Follow-up Clinic Reduces Emergency Room Visits and Admissions in High-Risk Patients After Chemoradiation Therapy for Head and Neck Cancer

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Purpose/Objective(s): Definitive therapy for head and neck cancer (HNC) is associated with significant acute morbidity. Recovery often involves adverse events (AEs) within the immediate post-treatment months, including visits to the emergency department (ED) or hospital admission (HA). Advanced practice nurses (APNs) are in a unique position as independent providers to help provide high-quality, cost-effective care. Patients (pts) with HNC undergoing radiation therapy (RT) or chemoradiation therapy (CRT) experience significant symptom burden and have a substantial rate of post-treatment complications. Here, the outcomes of pts seen in an APN clinic focused on acute rehabilitation as compared to historical outcomes.

Materials/Methods: In 2014, an APN-led clinic was initiated to focus on acute rehabilitation from definitive HNC therapies. We identified 25 pts (called the APN clinic group, APNCG) since the clinic’s initiation who were considered high-risk (HR) based on the presence of ≥1 of the following: limited social support (35%), nursing home resident (16%), multiple hydrations during treatment (18%), stereotactic body RT (SBRT) re-irradiation (15%), or feeding tube (16%). Twenty-four HNC pts (called the standard follow-up group, SFG), treated prior to the APN clinic’s initiation, were identified from an IRB-approved database. The SFG was seen in follow-up at 4-6 weeks post-RT then at 3 months post-RT, while the APNCG was seen beginning at 2-4 weeks and every 2-4 weeks thereafter until symptoms stabilize. Adverse events including ED visits and/or HA were recorded as the primary endpoint.

Results: A total of 49 pts (24 SFG; 25 APNCG) were included in this study. Primary tumor sites included oropharynx (47%), oral cavity (16%), larynx/hypopharynx (12%) and other (25%); 90% had stage IV or recurrent disease. All pts were treated with intensity modulated RT or SBRT techniques. Radiation therapy was given alone in 22 pts (45%) and concurrent chemotheraphy was given in 27 pts (55%) with either a cisplatin-based regimen (81%) or cetuximab (19%). Patients in the APNCG were seen twice as often as those in the SFG (2.0 vs 1.2 visits). Overall, 18 pts experienced 26 AEs, including 12 pts (50%) in the SFG versus 6 pts (24%) in the APNCG (P=.059). This difference was confined to the pts treated with RT alone, where 60% of pts in the SFG had a post-RT AE compared with only 16.7% in the APNCG (P=.010). No difference was found in the pts treated with CRT due to the intensive post-RT FU also provided by medical oncology (P=.816).

Conclusion: The initiation of an APN FU clinic for HNC HR pts post-RT allowed for more frequent outpatient visits and more intensive symptom management, which reduced the number ED visits and HA experienced in the first 3 mo post-RT. This practice model can help improve healthcare value for these pts.