

Palliative radiotherapy, bone metastases, and global assessments in palliative care

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With a focused issue on healing and spirituality in July 2017 (1), and another focused issue on palliative care for advanced dementia planned for October 2017 (2), *Annals of Palliative Medicine* remains committed to rapid author decision times following manuscript submissions and expedited publication times following manuscript acceptances to allow timely original research to be dissemination as quickly as possible to our readers. With those tenants in mind, we are pleased to present an extra, unscheduled issue of *Annals of Palliative Medicine* in August 2017 that features a great variety of original research articles across palliative care spectra.

In the first original article, Carvalho and colleagues perform an interesting retrospective analysis assessing the nutritional profile of over 100 terminal cancer patients and evaluate the correlation between global assessment scores and overall survival. Most prior reports on patients with advanced malignancies have focused on characterizing patients using a performance status metric, most typically either Karnofsky Performance Status (KPS) or Eastern Cooperative Oncology Group (ECOG) Scale of Performance Status. However, with the recognition that cancer cachexia is present in the majority of end-stage cancer patients and is a leading cause of death in cancer patients (3,4), and that functional capacity and survival are both related to nutritional status in cancer patients (5), there has been increasing interest in using global assessment tools in combination with performance status scales to provide prognostic information and allow for specific interventions. Carvalho *et al.* found that Patient-Generated Subjective Global Assessment scores are directly correlated with survival.

Annals of Palliative Medicine has had a recent focus on advancing the understanding of cancer-related and treatment-induced nausea and vomiting, with recent articles on prophylaxis of radiation-induced nausea (6,7), anticipatory nausea from chemotherapy (8), and prophylaxis and rescue of chemotherapy-induced nausea (9,10). In this issue, Stinson *et al.* report on the efficacy of anti-emetic regimens for nearly 200 head and neck cancer patients receiving concurrent chemotherapy and radiation therapy, the largest such retrospective analysis on nausea and vomiting in this population to date.

Next, colleagues from Memorial Sloan Kettering Cancer Center report on the palliative efficacy and local control of radiotherapy for lung metastases, the largest such analysis quantifying the effectiveness of palliative-intent radiotherapy for secondary lung tumors. The authors found that conventionally fractionated radiotherapy can effectively palliate a variety of symptoms associated with lung metastases, but that durable disease control and palliative is often lacking. More recently, stereotactic body radiation therapy (SBRT) has emerged as a safe and effective modality to treat oligometastatic disease (11,12), and SBRT has achieved high rates of local control and prolonged overall survival even for lung metastasis from otherwise relatively radio-resistant tumors like sarcoma (13). The investigators from Memorial Sloan Kettering confirmed the utility of this modality, demonstrating that the local failure among the 91 courses of SBRT was notably lower than the local failure among the 99 courses of conventionally fractionated radiotherapy for lung metastases.

Using a large tumor registry of over 5,000 patients, Ryoo and colleagues assessed the patterns of care among patients

with non-small cell lung cancer who developed brain metastases. Whole brain radiation therapy and stereotactic radiosurgery have long had roles in the management of brain metastases (14,15). The investigators found, however, that although most patients receive brain radiotherapy for their brain metastases, nearly one-quarter died within one month of radiotherapy. With emerging data that baseline symptoms of patients with brain metastases correlates with survival (16) and that subsets of patients may have limited benefit from whole brain radiation therapy (17), these findings underscore the importance of tailoring treatment decisions to projected life expectancy among cancer patients with brain metastases (18).

This issue of *Annals of Palliative Medicine* also features a pair of articles on bone metastases and resumes original investigations that are part of the Palliative Radiotherapy Column. The first article is an analysis of referral patterns to a bone metastases clinic at Odette Cancer Centre, Sunnybrook Health Sciences Centre in Canada. The second is the report of a small prospective study conducted in São Paulo, Brazil demonstrating that palliative radiotherapy for painful bone metastases can improve patient quality of life. In the Palliative Radiotherapy Column, Drost *et al.* assess bowel changes in patients receiving pelvic radiation therapy. Although radiation therapy to the bowel can cause acute changes that commonly manifest as loose stool or diarrhea (19), patients receiving irradiation to gastrointestinal organs may also experience radiation-induced nausea (20) that often requires the administration of anti-emetics, which themselves can cause constipation. Drost and colleagues found that among patients receiving anti-emetics, constipation is more prevalent than diarrhea among patients receiving pelvic radiotherapy, an important finding for providers to be vigilant in managing not just diarrhea but also constipation in these patients in order to improve their quality of life.

In the Surgical Palliative Care Column, Hamilton and colleagues report on their prospective assessment to assess peri-operative outcomes of patients treated with palliative surgery. The investigators identified that many patients have a poor understanding of their prognosis and the role that surgery may have in their overall treatment plan, but that many patients perceive benefit from palliative surgery.

This issue of *Annals of Palliative Medicine* also features an interesting study on miscommunication between healthcare workers and patients with advanced illnesses, a prospective assessment of plasma L-carnitine levels among patients receiving palliative care, a prospective study assessing the

benefits of a covered biliary stent and bare extension for patients with inoperable malignant biliary strictures in the distal common bile duct, and three case series or studies. The first case report is a series of patients with rare below-the-knee bone metastases, which present unique quality of life and mobility challenges for patients. The next is a case report of a patient on chronic opioids who achieved a dramatic pain improvement following opioid rotation that questions the equipotency calculations for narcotics and highlights the need to titrate carefully new medications. The last case study highlights the unique challenges of managing patients with malignant bowel obstruction.

Next are two highly provocative viewpoint articles and two interesting perspective articles. First, Choy comments on the critical unmet need of palliative care internationally and highlights the benefits to increasing access to palliative care providers. Then, Johnson provides his opinion as to why it is a violation of the basic ethical principles of medicine for physicians to participate in executions as part of capital punishment. Reid and colleagues next describe the rationale for developing elder service agency networks in the community that can identify older adults with unmet palliative care needs and supplement their access to palliative care. Finally, Swetz, a palliative care provider himself, discusses his personal experiences and challenges that he faced as his father battled end-stage illness.

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Footnote

Conflicts of Interest: The author has no conflicts of interest to declare.

References

1. Simone CB 2nd. Healing, spirituality, and palliative care. *Ann Palliat Med* 2017;6:200-2.
2. Simone CB 2nd. The growing challenge of dementia and its impact on patients, their caregivers, and providers. *Ann Palliat Med* 2017;6:299-301.
3. Fearon K, Strasser F, Anker SD, et al. Definition and classification of cancer cachexia: an international consensus. *Lancet Oncol* 2011;12:489-95.
4. Skipworth RJ, Stewart GD, Dejong CH, et al. Pathophysiology of cancer cachexia: much more than host-

- tumour interaction? *Clin Nutr* 2007;26:667-76.
5. Tan BH, Fearon KC. Cachexia: prevalence and impact in medicine. *Curr Opin Clin Nutr Metab Care* 2008;11:400-7.
 6. Li WS, van der Velden JM, Ganesh V, et al. Prophylaxis of radiation-induced nausea and vomiting: a systematic review and meta-analysis of randomized controlled trials. *Ann Palliat Med* 2017;6:104-17.
 7. Chiu N, Chiu L, Popovic M, et al. Latest advances in the management of radiation-induced pain flare, nausea and vomiting. *Ann Palliat Med* 2016;5:50-7.
 8. Ahrari S, Chow R, Goodall S, et al. Anticipatory nausea: current landscape and future directions. *Ann Palliat Med* 2017;6:1-2.
 9. Chiu L, Chiu N, Chow R, et al. Olanzapine for the prophylaxis and rescue of chemotherapy induced nausea and vomiting (CINV): a retrospective study. *Ann Palliat Med* 2016;5:172-8.
 10. Simone CB 2nd. Symptoms of palliative patients and their providers: depression, pain, nausea, and declines in quality of life. *Ann Palliat Med* 2016;5:153-6.
 11. Gomez DR, Blumenschein GR Jr, Lee JJ, et al. Local consolidative therapy versus maintenance therapy or observation for patients with oligometastatic non-small-cell lung cancer without progression after first-line systemic therapy: a multicentre, randomised, controlled, phase 2 study. *Lancet Oncol* 2016;17:1672-82.
 12. Patel AN, Simone CB 2nd, Jabbour SK. Risk factors and management of oligometastatic non-small cell lung cancer. *Ther Adv Respir Dis* 2016;10:338-48.
 13. Baumann BC, Nagda SN, Kolker JD, et al. Efficacy and safety of stereotactic body radiation therapy for the treatment of pulmonary metastases from sarcoma: A potential alternative to resection. *J Surg Oncol* 2016;114:65-9.
 14. Tsao MN. Brain metastases: advances over the decades. *Ann Palliat Med* 2015;4:225-32.
 15. Ojerholm E, Simone CB 2nd. Radiotherapy for brain metastases: quo vadis? *Ann Palliat Med* 2016;5:322-4.
 16. Wong E, Rowbottom L, Tsao M, et al. Correlating symptoms and their changes with survival in patients with brain metastases. *Ann Palliat Med* 2016;5:253-66.
 17. Jones JA, Simone CB 2nd. Whole brain radiotherapy for patients with poor prognosis: possibilities for the impact of the QUARTZ trial. *Ann Palliat Med* 2015;4:58-60.
 18. Chiu N, Chiu L, Lutz S, et al. Incorporation of life expectancy estimates in the treatment of palliative care patients receiving radiotherapy: treatment approaches in light of incomplete prognostic models. *Ann Palliat Med* 2015;4:162-8.
 19. Andreyev J. Gastrointestinal symptoms after pelvic radiotherapy: a new understanding to improve management of symptomatic patients. *Lancet Oncol* 2007;8:1007-17.
 20. Maranzano E, De Angelis V, Pergolizzi S, et al. A prospective observational trial on emesis in radiotherapy: analysis of 1020 patients recruited in 45 Italian radiation oncology centres. *Radiother Oncol* 2010;94:36-41.

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