

Quality of life, predictions of survival, feeding options, and symptom control for patients with advanced disease

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In this issue of *Annals of Palliative Medicine*, Chow *et al.* author an original report on baseline characteristics, symptoms, and quality of life following whole brain radiation therapy (WBRT) alone versus stereotactic radiosurgery (SRS) or neurosurgery with or without WBRT (1). WBRT has been a standard approach for the treatment of brain metastases for over 60 years (2), but there has been increasing interest in surgical resection (3) or SRS (4,5) to improve local control, reduce neurocognitive morbidity, and potentially even improve overall survival compared with WBRT alone. Current clinical decision on the use of WBRT alone versus local therapy with SRS or surgical resection with or without WBRT versus even palliative measures alone (6) is based on multiple features, including performance status, number of brain metastasis, primary tumor histology, extent of extracranial disease, and lesion resectability. The options to manage brain metastases have been the subject of numerous society guidelines and also a recent systematic review published in this journal (7). However, little has reported on how baseline quality of life characteristics have influences this treatment decision.

In the analysis by Chow *et al.*, 120 patients were enrolled and treated with WBRT alone (n=37) or local brain-directed therapy (n=83) and assess for outcomes using the Functional Assessment of Cancer Therapy-Brain (FACT-Br) tool. The authors found several differences in baseline patient reported outcome scores between the groups. While performance status at baseline was different and in favor of the local therapy group (P=0.002), and patients receiving WBRT had more lesions at presentation (P<0.001), other notable differences were identified between groups,

including baseline differences in functional wellbeing and other key components of FACT-Br (1).

The importance of patient-reported quality of life was also detailed in the review by Woo *et al.* (8). In their manuscript, the authors compared the European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Stomach (EORTC QLQ-STO22) and the Functional Assessment of Cancer Therapy-Gastric (FACT-Ga) questionnaires for patients with gastric cancer. Gastric cancer is a particularly important malignancy for assessing quality of life given that it is often associated with a poor prognosis and high symptom burden. While several differences between the tools were highlighted, both were found to show good internal consistency, test-retest reliability, and sensitivity to change. As both tools have been internationally validated, either can and should be used when attempting to assess quality of life among patients with gastric cancer. Prospective studies on gastric planning to assess patient reported outcomes should choose the quality of life tool based on specific patient characteristics and goals of the study. Such a lesson learned from this report is important across disease sites when investigators are performing trial design and integrating quality of life endpoints into their studies.

Prediction of patient survival is an important component of provider treatment decision and necessary for patients to make an informed treatment decision and determining appropriate goals of care and future planning (9). This is true for patients across such diagnoses as cancer, heart disease, and stroke. For oncology, as with performance status in patients with brain metastases, provider prediction

of survival to inform treatment decisions is used across malignancy types and across disease stages. While this prediction is often easier in advanced disease than early stage malignancies due to patients often experiencing a rapid and predictable functional decline (10), provider prediction remains inaccurate. Cheon *et al.* review the accuracy of clinician predictions of survival in patients with advanced cancer and find that providers generally overestimate survival in their patients (11). The authors call for the formulation of better survival prediction tools and honest communication of prognosis with patients and their families. This manuscript serves as an important reminder for providers to be aware of their potential bias in being overly optimistic in order to best help patients plan for end of life and avoid potentially unnecessary and even harmful interventions that can occur in the final days of a patient's life.

This issue of *Annals of Palliative Medicine* also provides a pair of articles on enteral and parenteral nutrition that are complimentary and highlight differences in thinking on the two feeding options for patients. Parenteral feeding, which employs intravenous nutrition that bypasses the usual process of eating and digestion, has been perceived to have lower mortality rates and allow for efficient caloric intake, compared with enteral feeding, which delivers nutritionally complete feed directly into the stomach, duodenum or jejunum. Both are commonly used feeding options among patients with terminal conditions receiving palliative care.

In the first article, Chow *et al.* (12) perform a systematic review and meta-analysis of these feeding options among patients with cancer. The study is the first comprehensive review comparing the modalities in nearly 15 years and found that parenteral nutrition was associated with a somewhat higher rate of infection but were otherwise similar in nutritional support complications, major complications, and mortality. The article by Cotogni dispels common misunderstanding regarding enteral and parenteral nutrition, discusses the pros and cons of each modality, and guides providers with decision points for making the choice between these feeding options (13).

The Palliative Radiotherapy Column features a pair of review articles that help to inform clinical practice. With palliative irradiation known to be associated with a risk of pain flare (14) and of radiation-induced nausea and vomiting (RINV) (15), Chiu *et al.* describe advances in the management of common symptoms that are experienced as a result of palliative radiation therapy, including pain flare and nausea (16). The authors recommend anti-emetic prophylaxis given based on emetic risk categories that they

detail, and they call for additional investigation into pain flare prophylaxis.

Next, Bedard *et al.* review the current literature on the use of stereotactic body radiation therapy (SBRT) for non-spine bone metastases (17). Extracranial SBRT, also termed stereotactic ablative radiotherapy (SABR), is well established as an ideal option for patients with medically inoperable non-small cell lung cancer (18) and more recently reported as a viable first-line option for medically operable patients (19,20). However, fewer prospective studies have focused on SBRT for palliation. This modality may be a particularly attractive option for select patients receiving radiation therapy for metastatic disease, and its use for bone metastases has recently been described in this journal (21,22). In perhaps the most comprehensive review on SBRT for non-spine bone metastases to date, Bedard and colleagues find that SBRT was associated with few high grade toxicities and with local control rates consistently greater than 85%. The authors call for a need for consensus endpoints across SBRT studies and a randomized trial of single versus multiple fractions of SBRT to determine if there is a dose response phenomenon.

In a very lively and fun piece, Porzio *et al.* uses basketball as a metaphor for teaching pain therapy (23). Porzio, himself a former basketball coach who is now a supportive and palliative care oncologist, playfully describes a basketball game between a team of oncologists and a pain team in the context of using the game as a training course on pain therapy. By identifying the weakness of the pain team, the oncologists and palliative care provides can win the game and help alleviate the pain and suffering of patients.

The January issue of *Annals of Palliative Medicine* is concluded by a meeting report of the Society for Palliative Radiation Oncology (SPRO) by Wei and colleagues (24). The article described the origins of SPRO and the clinicians and investigators who founded the society who are dedicated to excellence in end-of-life radiation oncology and the delivery of effective, efficient, safe, cost effective and collaborative palliative radiation therapy. The article also details the mission statement of SPRO, its current and planned roles in research, education and advocacy, and the report of the Second Annual Meeting of SPRO that occurred in San Antonio, Texas in October 2015.

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Footnote

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

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