



## At the intersection of palliative care and radiation oncology

Radiation oncologists, as oncology providers who frequently care for patients with advanced cancers, serve as primary palliative care providers for their patients. The intersection of palliative care and radiation oncology, or “palliative radiation oncology”, is a concept that would have been foreign over a decade ago. However, given increasing awareness and understanding of the importance of palliative care to cancer patients’ quality-of-life and to disease outcomes, the radiation oncology community is primed to incorporate generalist palliative care into everyday practice. This focused issue, including eleven invited articles and two original research articles, explores the complex intersection of palliative care and radiation oncology to provide a comprehensive overview of their integration in the care of advanced cancer patients.

The history behind palliative radiation oncology’s development (1) provides a key backdrop to understanding the current state of primary palliative care in the field of radiation oncology. A further critical foundation is a review by Johnstone (2) of dedicated structures to meet the complex care needs of palliative cancer patients seen in radiation oncology. This article includes guidance on how these dedicated care structures can be built in radiation oncology departments. Palliative care in radiation oncology occurs both in high-resourced to resource-constrained cancer care settings. Elmore *et al.* (3) provide an overview of the distinct palliative care needs in global radiation oncology settings where care resources are limited. Another important and unique setting for palliative radiation oncology is found within pediatric cancer care. Stachelek *et al.* (4) provide an overview of palliative radiation therapy for pediatric patients with advanced cancers and highlight the distinct needs of this patient population.

Many, if not most, radiation oncology clinics do not have a dedicated palliative radiotherapy program or a multi-disciplinary clinic with palliative care. Nonetheless, given the ubiquity and complexity of advanced cancer patients with symptomatic disease, radiation oncologists believe that they should be comfortable providing general palliative care for these patients. To that end, Lam and Tseng (5) describe the breadth of a radiation oncologist’s role in palliative care and radiotherapy, including interaction within a multi-disciplinary team, prognostication, communication, identification of palliative radiotherapy candidates, appropriate dose/fractionation, and pain control.

Prognostic disclosure and communication are important skills for radiation oncologists, which allow radiation oncologists to assess an advanced cancer patient’s goals of care, promote informed and shared decision making, and address questions from patients and their families. Gaps in physician-patient communication may contribute to patients’ misunderstandings of the goals and limitations of their care. Yet, many oncologists do not feel comfortable or equipped to engage in these difficult conversations. Martin *et al.* (6) summarize communication skills in palliative radiation oncology and use case vignettes to provide roadmaps to navigate common communication tasks a radiation oncologist might encounter.

While these skills in palliative care and radiation oncology may be learned or refined on-the-job, there is recent interest to incorporate formal palliative care training into radiation oncology residency training, ACGME core competencies, and milestone requirements. By doing so, this may promote a standardized curriculum and ensure a minimum proficiency among graduating residents. Ioannides and Wei (7) summarize the current gaps in palliative care and radiation oncology education, current teaching modules and programs, and future directions to improve resident education in palliative care.

Looking into the future of palliative radiation oncology, there is interest in how palliative radiotherapy may intersect with novel systemic agents and advanced treatment techniques. Immunotherapy has emerged as a mainstream therapy for many metastatic cancers and it is frequently given in parallel with conventional radiotherapy or stereotactic body radiotherapy (SBRT). Bang and Schoenfeld (8) review the data on safety, dose, timing, and site of radiotherapy of this approach and summarize the ongoing studies exploring the local and systemic benefits of combined immunotherapy and radiotherapy. Basic science and translational research are critical to driving the field of oncology forward, and advanced cancer often provides a treatment setting where research questions can be explored. In that vein, Huynh and Spektor (9) provide an overview of basic science and translational research opportunities in palliative radiation oncology.

Advanced radiotherapy techniques including SBRT are increasingly being used in metastatic disease, especially in the oligometastatic setting. In this complex clinical scenario, local, aggressive therapy may improve local control and potentially

translate to improved survival. Butala *et al.* (10) review the literature and discuss factors to be considered for this approach. With likely increased use of SBRT in the future for advanced cancer patients, there is interest to reduce the time from treatment planning to initiation of radiotherapy. Wilson *et al.* (11) report the results of their STAT-RT (Scan-Plan-QA-Treat) trial. They demonstrated that rapid palliative SBRT was feasible and safe with high patient satisfaction. Further research in this area is certainly needed to better define the role of SBRT in rapid palliation.

Finally, highlighting the unique palliative care needs that emerge in advanced cancer patients seen in radiation oncology clinics, Yerramilli *et al.* (12) report their survey-based study of patients seen for palliative radiation therapy. They examined the frequency and types of ethical issues encountered by members of the palliative radiation oncology team.

Palliative radiation oncology is an emerging field within radiation oncology that integrates primary palliative care with the technical aspects of radiation oncology in advanced cancer. The diversity of topics highlighted in this issue underscore the complexity of addressing primary palliative care needs together with the technical aspects of radiation therapy for advanced cancer. Furthermore, these articles highlight the need for ongoing advancement of clinical care structures, education, and research to provide holistic care to advanced cancer patients that optimizes patient disease and quality of life outcomes.

## Acknowledgments

None.

## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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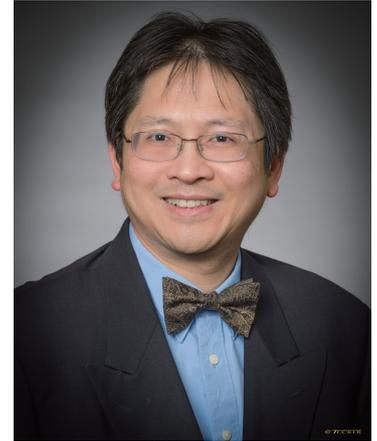
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doi: 10.21037/apm.2019.07.02

**View this article at:** <http://dx.doi.org/10.21037/apm.2019.07.02>

**Cite this article as:** Balboni TA, Tseng YD, Lo SS. At the intersection of palliative care and radiation oncology. *Ann Palliat Med* 2019;8(3):218-220. doi: 10.21037/apm.2019.07.02