Letter to the Editor | Palliative Medicine and Palliative Care for Incurable Cancer

Addressing concerns and uncertainties surrounding the application of palliative radiotherapy in cases with a 30-day expected mortality

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We recently had the opportunity to read the letter to the editor entitled "30-day Expected Mortality and Hemostatic Palliative Radiotherapy: Definitions, Certainties and Uncertainties" by Vargas (1), which relates to our published narrative review about 30-day mortality (30-DM) metric and the use of palliative radiation treatment (RT) in a single fraction (2).

Several of the presented points align with our perspective. Undoubtedly, the 30-DM serves as a valuable quality metric. However, practical implementation often involves its utilization in determining the continued eligibility of patients for palliative RT (3). Given the established data for pain flares and delayed responses, many clinicians resort to this threshold, leading to scrutiny from our peers when treating less fortunate patients. While acknowledging the challenges in predicting the 30-DM (4), we find ourselves in need of a criterion to guide the decision-making process for administering palliative RT. Employing 'an educated guess' regarding prognosis, although not foolproof, proves superior to a lack of guidance.

Furthermore, we agree with the point that there are more data for single fraction radiotherapy (SFRT) for bone metastases and spine (5,6), and thus there are greater challenges when attempting to predict response in other

scenarios, such as for the use of hemostatic RT.

As reported, the absence of sufficient data and high-quality studies poses a challenge. In the majority of trials, assessments of toxicity and response are predominantly provided by physicians, even in cases involving curative intent. Patient-reported outcome measures (PROMs) are rarely incorporated as a primary endpoint and are more commonly relegated to secondary endpoints when performed (resulting in underpowered studies for this aspect). Retrospective data inherently carry limitations. Furthermore, initiating a study for palliative patients that involves systematic follow-up, even in the absence of complaints, is intricate due to ethical considerations specific to this population, as well as the frequently compromised performance status often seen in these patients. However, hemostatic RT proves to be a valuable instrument, characterized by minimal invasiveness, low rate of side effects and relatively easy accessibility, rendering it an effective solution, although there is less evidence for the use of SFRT (7).

While lacking high quality studies, our clinical experience consistently yields favourable results, thereby prompting the suggestion of its consideration as a viable choice for patients with advanced disease and poor performance status; even within low-income countries, where patients often present with more advanced illnesses and palliative RT emerges as a potential avenue for treatment. Therefore, we agree that patient selection demands a careful consideration; however, we disagree with the outright exclusion of any form of treatment during the end of the life. Hemostatic RT should be contemplated as an integral component of optimal supportive care, similar to other minimally invasive interventions such as draining ascites or pleural effusion for symptomatic relief.

In conclusion, we agree that the need for good metrics system for patients at the end of life and prospective trials on hemostatic radiotherapy is evident but challenging to initiate. Furthermore, we advocate for personalized deliberation concerning the merits and drawbacks of palliative radiotherapy in individuals grappling with advanced disease and poor performance status. The application of a patient-centered, multidisciplinary approach should extend into palliative care, beyond the confines of definitive treatment scenarios. Furthermore, the feedback from patients through directed surveys would be useful in addressing these concerns; nonetheless, the unique nature of the palliative care patients presents challenges in this endeavour.

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