Reviewer’s report

Title: Palliative radiotherapy near the end of life

Version: 0 Date: 04 Jan 2019

Reviewer: Scott Murray

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This is a very useful review concerning the identification of patients who may experience limited benefit from palliative RT due to dying within 30 days of the treatment. It highlights a very important issue that some patients die worryingly soon after RT.

I found the introduction and the actual research very interesting, and well conducted and reported, to the extent of my knowledge.

However it is the conclusions I would like to raise, and particularly the focussed conclusion that physicians need additional tools to identify such patients, or specific short treatments or "alternative interventions". A conclusion that appears rather weak, and indeed misses 2 major points: 1 that prognostication for patients with advanced progressive disease is very difficult for individual patients. 2 At a minimum the authors should acknowledge that generalist or specialist palliative care should, indeed must be named as an alternative. Indeed whenever palliative XT is given, it is now clearly acknowledged that the patient should also receive a palliative care approach from the same clinician who is delivering the disease-modifying treatment, (Abernethy A, https://www.nejm.org/doi/full/10.1056/NEJMp1215620 ) or from the patient's family physician or palliative care specialist if the palliative care needs are complex. Also a large number of trials of early palliative care even before this stage are underway in the footsteps of Temmel

I do understand that various payment issues have and still restrict the ability for some patients in the USA to benefit from palliative care and disease-modifying care, but that should not interfere with or restrict the conclusions. The WHO in 2014 resolved that palliative care should be integrated with disease management in all life-threatening illnesses, so the patients reported here should qualify for this approach.

Research from Scotland moreover identifies that when a patient gets cancer, they are likely to have psychological and existential distress at 4 key times: at diagnosis, when primary treatment is finished, at recurrence, and then in the last days. See Murray SA, Kendall M, Mitchell G, Moine S, Amblès-Novellas J, Boyd K. Palliative care from diagnosis to death. BMJ. 2017;356.
Thus starting palliative chemo or XRT should in itself be a late trigger for starting a palliative care approach by the relevant physician or referral to a specialist if required.

This has been highlighted in the BMJ, and is increasingly the case in the UK. Palliative radiotherapy and holistic palliative care together. BMJ. 2018;361:k1875.

I would thus suggest that with the above points in mind the authors could revise the discussion and conclusions, especially that all patients with progressive cancer should be offered a palliative care approach as well as palliative RT if specifically indicated. Otherwise the palliative care readership of this journal might be upset.

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Yes

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