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Liver SABR: an effective and feasible alternative to surgery during the COVID19 pandemic

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Dear Madam

The COVID-19 epidemic is having an unprecedented impact on UK cancer services. Access to radical surgery has been severely restricted and resources for systemic therapy provision are being limited as the crisis unfolds. Radiotherapy resources are rightly being focused on patients being treated with curative intent. However, it is our experience that access to stereotactic ablative radiotherapy (SABR) is diminishing, predominantly due to staffing shortages.

SABR offers a non-invasive, outpatient ablative approach with minimal hospital footfall and with lower immunosuppressive risks than chemotherapy. The recently published long term outcomes of the SABR COMET study illustrate the ability of SABR to substantially impact survival across tumour types (1). The NHS England Commissioning through Evaluation process has shown that SABR can be safely delivered in the UK (2, 3).

SABR requires specialist multi-disciplinary expertise. The majority of radiotherapy departments are planning to maintain their capacity for category 1-4 treatments (4) and many have therefore suspended SABR for oligometastatic disease. However, we are concerned that diminishing access to SABR, at a time when access to other curative local treatment modalities is already restricted, will result in poorer patient outcomes in the short and medium term when this need not be the case.

Patients with liver-limited colorectal cancer have a five year survival of 40% following surgery (5). Given the evidence supporting SABR for colorectal liver metastases (6), we believe this should be prioritised if patients are unable to access surgery and interventional ablative techniques. Similarly, SABR should be considered for patients with hepatocellular carcinoma while access to other services (particularly transplant) is limited. We urge radiotherapy departments to preserve access to SABR for patients in these situations, particularly as the COVID-19 epidemic wanes and staffing levels allow re-establishment of normal services.

Yours faithfully

References

- Palma DA, Olson R, Harrow S e al. Stereotactic ablative radiotherapy versus standard of care palliative treatment in patients with oligometastatic cancers (SABR-COMET): a randomised, phase 2,open-label trial. Lancet. 2019 May 18;393(10185):2051-2058. doi:10.1016/S0140-6736(18)32487-5.
- 2. <u>https://www.engage.england.nhs.uk/consultation/sabr-metachronous-extracranial-oligometastatic/</u>
- 3. <u>https://www.engage.england.nhs.uk/consultation/sabr-for-hepatocellular-carcinoma-adults/</u>

- 4. <u>https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/specialty-guide-acute-treatment-cancer-23-march-2020.pdf</u>
- Jones R, P, Kokudo N, Folprecht G, Mise Y, Unno M, Malik H, Z, Fenwick S, W, Poston G, J: Colorectal Liver Metastases: A Critical Review of State of the Art. Liver Cancer 2017;6:66-71. doi: 10.1159/000449348
- Petrelli F, Comito T, Barni S, Pancera G, Scorsetti M, Ghidini A; SBRT for CRC liver metastases. Stereotactic body radiotherapy for colorectal cancer liver metastases: A systematic review. Radiother Oncol. 2018 Dec;129(3):427-434. doi: 10.1016/j.radonc.2018.06.035. Epub 2018 Jul 9. PubMed PMID: 29997034.

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