

Session Track: RTT

Session Format: Teaching lecture

Session Title: Less is more: The increasing use of hypofractionation in routine clinical practice and its impact on patient care

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Presentation Title: How may shorter fractionation schedules affect patient care?

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This session aims to explore the use of hypofractionation in the radiotherapy management of different cancer types and how this ultimately can affect patient care.

Hypofractionation has shown to be beneficial in the management of a wide range of cancers^{1,2} including other advantages such as cost savings³. Trials over the last decade^{4,5,6} have demonstrated the advantages of hypofractionation compared with a standard radiotherapy regimen³.

Covid-19 significantly impacted the way in which cancer patients⁷ are managed and even though the use of hypofractionation is well established in some cancer types; the application thereof during the pandemic has been widely expanded to minimise treatment time⁸. Even though the treatment outcomes have been well defined, there is limited evidence to suggest changes in patient care. Some oncology centres advocated for a reduced contact time between patient and staff⁹.

Hypofractionation in an ageing population is particularly advantageous in allowing people to receive treatment in a shorter time demonstrating treatment outcomes similar to younger age groups¹⁰ however; greater consideration should be given to performance status and comorbidities associated with these treatment outcomes¹¹. Fractionation schedules which allow delivery in less fractions, can be highly effective with limited treatment-related toxicity. Studies have shown that the late consequences of radiotherapy in these patient groups are seldom an issue even with larger fraction sizes¹². However more recent studies suggest that a reduction in treatment time should not be the only reason for selecting this approach. Moderate hypofractionation should therefore be considered for those patient who are younger and who might experience long terms effects¹³. More studies are now investigating the tolerability of ultra-hypofractionated radiotherapy in an attempt to improve the therapeutic gain in the management of cancer suggesting that these approaches are well-tolerated and showed no statistical difference in toxicity¹⁴.

Hypofractionation in radiotherapy may be a good alternative to conventional fractionation however patient care remains paramount in the management of all toxicities related the radiotherapy delivery. There is no evidence to suggest the patient care of these patients have changed, however the tolerability and outcomes of this method of delivery requires constant review. Patient care

needs to consider the site of treatment, age of the patient, performance status, and tolerability. A model of shared decision making in managing care is advocated with greater emphasis on self-care.

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