Turning up the stereo in lung cancer

The landscape of lung cancer treatment is rapidly evolving with the clinical diffusion of newer surgical, medical and radiation treatment modalities. Stereotactic ablative radiotherapy (SABR, also known as stereotactic body radiotherapy or SBRT) is characterized by ultra-high doses of radiation delivered over a few fractions, largely enabled by advances in the radiation planning and delivery process. In this special issue of *Therapeutic Radiology and Oncology*, we discuss current paradigms and controversies on practical topics related to the use of lung SABR that face the modern oncologist in daily treatment decisions.

As lung SABR is generally well tolerated, its role in the potentially operable early-stage lung cancer patient is explored. On the other extreme, higher-risk scenarios in which the relative benefits of SABR need to be carefully considered include scenarios such as in central/ultra-central tumors, previously treated lung cancers, and in patients with co-existing interstitial lung disease. From a diagnostic point of view, common management questions that arise include the suitability of empiric lung SABR for a solitary pulmonary nodule that is suspicious for malignancy, and distinguishing fibrosis from recurrence following treatment. Looking toward the future, advances from both a technical (protons) and medical (immunotherapy) perspective are active areas of research.

We must also not forget that lung SABR is a highly technical endeavor, and therefore quality assurance is of utmost importance. Therefore, as this technology expands, ongoing collaborations between experienced and learning centres, whether in developed or developing regions, is encouraged. It is through such partnerships that the broader radiation oncology community will be able to expand this technology in a fashion that minimizes toxicity and ensures that the excellent outcomes that have been reported thus far are highly generalizable to all regions.

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