Dual-Modality Liver-Directed Therapy for Primary Liver Cancer

Charles R. Thomas Jr, MD

Hepatocellular carcinoma (HCC) is one of the most common solid tumors worldwide and continues to be a major public health problem. While there are level 1 data supporting the use of small-molecule, tyrosine kinase inhibitors against the pathways involved in angiogenesis and tumor proliferation for locally advanced or metastatic HCC, the incorporation of different liver-directed therapeutic agents continues to evolve.1 The goals of HCC treatment include a spectrum from pure palliation to serving as a bridge-to-liver transplant. The intersection of interventional radiology and radiation oncology is part of the multidisciplinary approach to primary liver cancer.2 In this issue of JAMA Oncology, Huo and Eslick3 report on a systematic review and meta-analysis comparing single-modality transcatheter arterial chemoembolization (TACE) with dual-modality TACE plus radiotherapy, with the latter approach being superior. This study would have been strengthened if recently standardized imaging guidelines of HCC, the Liver Imaging Reporting and Data System (LI-RADS) had been followed.4 This study does not tell us whether radiofrequency ablation, often used as a consolidative liver-directed approach, is equal to consolidative radiotherapy, nor does it define the impact of other predictive and prognostic factors, such as initial BCLC (Barcelona Clinic Liver Cancer) stage [EASL-EORTC 2012], variability in target delineation, treatment planning, use and type of image guidance techniques, radiotherapy dose-fractionation, and differences between Asian and non-Asian patients.5 The analysis from Huo and Eslick3 provides some rationale for dual-modality liver-directed therapy being conducted at many centers. Nevertheless, the ill-defined therapeutic landscape for localized HCC requires the completion and reporting of well-designed prospective trials that incorporate a multidisciplinary approach and include investigators working together.

Conflict of Interest Disclosures: None reported.


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