



Oncological benefit of anatomic resection for patients with hepatocellular carcinoma

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To the editor,

With great interest, we read the article by Sato et al., which reviews the debate between anatomic resection (AR) and non-anatomic resection (NAR) for patients with hepatocellular carcinoma (HCC) [1]. The authors concluded that surgery does not seem to influence the risk of HCC recurrence. According to the authors' thorough review of the literature, only one small randomized controlled trial (RCT) compared AR and NAR. Conversely, approximately 30 retrospective cohort studies addressed this clinical question, the most recent applying propensity score-matching analysis to minimize selection bias [2, 3].

The authors reported that survival time is inappropriate for the primary endpoint.¹ However, since systemic and local metastases are difficult to distinguish, overall survival can be a second-best endpoint. The tumor blood flow (TBF) drainage theory presents an interesting hypothetical mode of tumor spread for HCC, and liver resection based on the TBF drainage was proposed by Sakon et al., including the authors of this review [4]. However, as there are very limited supporting data from other liver surgical center groups, it is inappropriate to emphasize the TBF concept, not widely supported by the surgical community, in a review article in this journal.

The authors also pointed out that the surgical margin and AR are confounded; however, AR is generally a procedure ensuring an adequate surgical margin, which should be considered superior to NAR. An RCT comparing AR and NAR may be difficult because the required case number would

need to be in the hundreds to detect a small but clinically meaningful advantage of AR. However, it is not negligible that at least several propensity score-matching studies and meta-analyses demonstrated the oncological benefit of AR. Indeed, some previous retrospective studies failed to show the oncological benefit of AR, which does not mean that they provided evidence to deny AR. We must be careful to conclude that there is no proven survival benefit of AR.

Declarations

Conflict of interest No conflict of interest or financial support.

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