Editorial

Can indication of hepatic resection for hepatocellular carcinoma patients be expanded?

Keiichi Kubota

Department of Surgery, Tohto Bunkyo Hospital, Tokyo, Japan

Correspondence to: Keiichi Kubota, MD, PhD. Department of Surgery, Director of Tohto Bunkyo Hospital, 3-5-7 Yushima, Bunkyo-ku, Tokyo 113-0034, Japan. Email: t.kubotak.toubyo@theia.ocn.ne.jp.

Comment on: Barros AZA, Fonseca GM, Kruger JAP, *et al*. Liver resection for hepatocellular carcinoma beyond the BCLC: are multinodular disease, portal hypertension, and portal system invasion real contraindications? J Gastrointest Oncol 2022;13:3123-34.

Keywords: Hepatic resection; indication criteria; Barcelona Clinic Liver Cancer prognosis and treatment strategy guideline (BCLC guideline); hepatocellular carcinoma (HCC)

Submitted Nov 28, 2022. Accepted for publication Jul 31, 2023. Published online Aug 30, 2023.
doi: 10.21037/jgo-2022-03
View this article at: https://dx.doi.org/10.21037/jgo-2022-03

There have been major advances in the treatment for hepatocellular carcinoma (HCC). Firstly, I congratulate the authors on the excellent achievements of surgical treatment for HCC patients (1). Really, it is not easy to treat HCC patients. Many factors including number and size of HCC, liver function, portal vein invasion and presence or absence of liver cirrhosis may affect the treatment selection among hepatic resection, radio frequency ablation, transcatheter arterial embolization, systemic therapy and transplantation. In this complex situation, the Barcelona Clinic Liver Cancer prognosis and treatment strategy (BCLC) guideline is used for deciding a treatment option for HCC patients in many countries (2-4). Although BCLC guideline enables to standardize treatment allocation for HCC patients, for us surgeons, it still seems to restrict indications of hepatic resection to selective patients. The authors insisted that many reports from Eastern and European centers are less dogmatic and restrictive regarding the indications for HCC resection unlike the BCLC guidelines, since many patients with large tumors, nodules less than 3 nodules, or regional portal vein tumor invasion may benefit from resection. Then in this paper, the authors discussed the results of surgical treatment indicated by more liberal indication than proposed by the BCLC guidelines 2010 and 2018, in which hepatic resection was indicated only to patients with single nodule (withdrawal of the 5-cm tumor size limit for resection in 2018 BCLC).

To be more concrete, the authors applied hepatic resection to patients with nodules less than 3 nodules, portal invasion to the first-, second- and third-order branch, and no significant portal hypertension. They compared overall survival (OS) and disease-free survival (DFS) after resection in patients with none, one, two or three of the main risk factors, including portal hypertension, portal system invasion, and presence of more than one HCC nodule, which were proposed by the BCLC criteria in 2010 as contraindications to resection (2,3). Multivariate analysis demonstrated that independent risk factors for OS were portal hypertension, the presence of more than one HCC, or satellite nodules on imaging examinations. Independent risk factors for DFS were increased alpha-fetoprotein levels and more than one HCC nodule. Nodule size and presence of portal invasion alone did not affect OS and DFS. Furthermore, they showed that there was no significant difference between the survival of patients resected in accordance with BCLC 2010 and from those resected, but that BCLC would have contraindicated surgery. While analysis of the OS and DFS curves demonstrated that patients who underwent resection in accordance with BCLC 2018 guidelines had higher OS and DFS than those in whom the BCLC guidelines would have contraindicated resection. Finally, they concluded that selected patients with one BCLC contraindication factor may undergo resection with good results, whereas those with two factors should

be allocated for hepatectomy only in favorable scenarios. Patients with the three risk factors do not appear to benefit from resection. These recommendations sound reasonable. In this paper, the value of serum alpha-fetoprotein (AFP) level was not fully discussed, but C-reactive protein (CRP) and AFP levels were reported to be associated with prognosis (5). The value of tumor marker should be further evaluated for selecting treatment option and prognosticating HCC patients. In Japan, ICG retention rate at 15 minutes is used for selecting indication of surgery for patients with the number less than 3 nodules (6). Portal hypertension and portal system invasion are not criteria for contraindicating surgery. In my routine practice, when a platelet count is less than 60,000/mL, splenectomy is performed, resulting in an increase of platelet, then followed by hepatic resection. I do not discuss whether this treatment strategy is justified or not. I just agree with the authors on the point that hepatic resection for patients with one or two contraindication criteria of BCLC guidelines may benefit such patients.

Updated BCLC guidelines 2022 is still restrictive against surgery (7). It is obvious that extension of surgical indication to HCC patients will contribute to improving prognosis of patients who would undergo palliative treatment based on BCLC guidelines 2022. In this aspect, this paper casts a new light on the indication of hepatic resection for HCC patients. Although BCLC guidelines are well organized for allocating a treatment option to HCC patients, now is the time to reconsider selection criteria of hepatic resection in accordance with BCLC guidelines and expand its indication.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned by the editorial office, *Journal of Gastrointestinal Oncology*. The article did not undergo external peer review.

Conflicts of Interest: The author has completed the ICMJE uniform disclosure form (available at https://jgo.amegroups.com/article/view/10.21037/jgo-2022-03/coif). The author has no conflicts of interest to declare.

Ethical Statement: The author is accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

References

1. Barros AZA, Fonseca GM, Kruger JAP, et al. Liver resection for hepatocellular carcinoma beyond the BCLC: are multinodular disease, portal hypertension, and portal system invasion real contraindications? J Gastrointest Oncol 2022;13:3123-34.
2. Forner A, Reig ME, de Lope CR, et al. Current strategy for staging and treatment: the BCLC update and future prospects. Semin Liver Dis 2010;30:61-74.
3. Bruix J, Sherman M; American Association for the Study of Liver Diseases. Management of hepatocellular carcinoma: an update. Hepatology 2011;53:1020-2.
4. Marrero JA, Kulik LM, Sirlin CB, et al. Diagnosis, Staging, and Management of Hepatocellular Carcinoma: 2018 Practice Guidance by the American Association for the Study of Liver Diseases. Hepatology 2018;68:723-50.
5. Mori S, Kita J, Kato M, et al. Usefulness of a new inflammation-based scoring system for prognostication of patients with hepatocellular carcinoma after hepatectomy. Am J Surg 2015;209:187-93.
6. Kubota K, Aoki T, Kumamaru H, et al. Use of the National Clinical Database to evaluate the association between preoperative liver function and postoperative complications among patients undergoing hepatectomy. J Hepatobiliary Pancreat Sci 2019;26:331-40.
7. Reig M, Forner A, Rimola J, et al. BCLC strategy for prognosis prediction and treatment recommendation: The 2022 update. J Hepatol 2022;76:681-93.

Cite this article as: Kubota K. Can indication of hepatic resection for hepatocellular carcinoma patients be expanded? J Gastrointest Oncol 2023;14(4):1907-1908. doi: 10.21037/jgo-2022-03

