

Pros: For Oncological Safety

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In treatment for hepatocellular carcinoma (HCC), high rate of recurrence even after curative resection remains an unsettled problem. To reduce recurrence rate, it has been recommended to completely remove area of tumor-bearing portal vein, considering of the tendency of HCC scattering via the portal venous system^{1,2)}. Because, on the other hand, HCC is usually associated with an injured liver, it is required to preserve functional liver volume as much as possible to prevent postoperative critical liver failure. Anatomic resection of subsegment or segment is a reasonable procedure to overcome those conflicting demands.

This procedure includes 3 steps; 1) identification of the tumor-bearing subsegment or segment, 2) recognition of the correct ligation point on the portal triads, 3) liver parenchyma transection under inflow occlusion.

The indication of anatomic resection is determined by the Makuuchi's criteria. Between 1994 and 2008, we performed anatomic resection for a single and primary HCC smaller than 5cm in 184 patients, respectively³). The 5-year recurrence rate and OS were 57% and 82%, respectively, which were better than 75% (recurrence rate) and 72% (OS) in the patients (n = 96) undergoing non-anatomic resection for HCC with the same tumor status. The positive impact of anatomic resection for HCC on long-term outcomes has been also supported by other cohort studies^{4,5}).

In conclusion, anatomic resection would be the first choice as a surgical procedure for HCC, if liver function permits.

References

- 1. Makuuchi M, et al. Surg Gynecol Obstet 1985;161(4):346-50.
- 2. Hasegawa K, et al. Ann Surg. 2005;242(2):252-9.
- 3. Shindoh J, et al. HPB 2013;15(1):31-9.
- 4. Regimbeau JM, et al. Surgery. 2002;131(3):311-7.
- 5. Eguchi S, et al. Surgery. 2008;143(4):469-75.