

Risk Factors And Long-term Prognosis Of BCLC Stage 0/A Hepatocellular Carcinoma For Beyond Milan Recurrence After Hepatectomy: A Multicenter Observational Study

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Background : Data on recurrence are important to inform surveillance and improve long-term surgical outcomes for patients with hepatocellular carcinoma (HCC). We sought to identify risk factors and long-term prognosis among patients who experienced beyond-Milan recurrence (BMR) after hepatectomy for early-stage HCC.

Methods : Patients who underwent hepatectomy for BCLC stage 0/A HCC were identified from a multi-institutional database. Predictors of BMR and risk factors associated with post-recurrence survival (PRS) among patients with BMR were assessed using univariate and multivariate Cox-regression analyses.

Results : Among 753 patients, 138 (18.3%) developed BMR at a median follow-up of 51.8 months. Regular surveillance (interval follow-up ≤ 3 months within 1 year and ≤ 6 months in subsequent years after surgery) was not carried out for 53 (38.4%) patients who developed BMR. On multivariate analysis, increased risk of BMR was independently associated with preoperative alpha-fetoprotein level >400 ng/mL, tumor size >5.0 cm, multifocal disease, microvascular invasion, and no/irregular recurrence surveillance. Median PRS among patients with BMR was only 8.4 months (95%CI:7.0–9.8 months). Among patients who developed BMR, Child-Pugh grade B/C, early recurrence within 1 year after surgery, macrovascular invasion/distant metastasis, and non-curative treatment of recurrence were independent risk factors associated with worse PRS.

Conclusions : Nearly 1 in 5 patients developed BMR following hepatectomy for early-stage HCC. Patients with BMR had a median survival of less than 1 year after diagnosis of the recurrence. Regular surveillance is an important and actionable measure to decrease BMR and, in turn, improve long-term survival among patients treated with hepatectomy for HCC.

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