中文題目：預測經射頻燒灼術後復發小型肝癌病患之預後

英文題目：Predicting outcomes for recurrent hepatocellular carcinoma within Milan criteria after complete radiofrequency ablation

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前言：

Intrahepatic distant recurrence (IDR) is a significant problem for patients who have undergone radiofrequency ablation (RFA) for hepatocellular carcinoma (HCC). The objective of the study was to investigate risk factors and to predict outcomes of recurrent IDR within Milan criteria after complete RFA for primary early-stage HCC.

材料及方法：

This retrospective study reviewed 495 patients with recurrent HCC conforms to Barcelona clinic liver cancer stage 0/A after complete RFA for early-stage HCC in Kaohsiung Chang Gang Memorial Hospital from June 2003 to September 2018, and after excluding 146 patients with local recurrence or incomplete laboratory data, a total of 349 patient cases were compiled and their baseline characteristics, further treatment modalities after tumor recurrence and survival were analyzed.

結果：

After a median follow-up of 36.2 months, 92 patients had expired. The majority of patients were male (59.9%) with a median age of 64.3 years (range:38-88). The cumulative 1-, 3-, and 5-year overall survival (OS) rates after treatment for recurrent HCC was 95.5%, 80.4%, and 67.2% respectively. On univariate analysis, age greater than 65 years, end-stage renal disease, heart failure, Child-Pugh classification B, platelet count less than 150,000/ul , IDR occurring within 2 years, a 2nd recurrence developing within 1 year after treatment, modified albumin-bilirubin (m-ALBI) grades 2a and 2b or 3, and aspartate aminotransferase-to-platelet ratio index (APRI) >1 were significant risk factors for OS. Further multivariate analysis results showed that end-stage renal disease(Hazard ratio (H.R.)=2.33, 95% confidence interval (CI) (1.14-4.80), p=0.021), m-ALBI grade 2a (H.R.=2.86, 95% CI(1.45-5.67), p=0.003) and m-ALBI grades 2b or 3 (H.R.=2.30, 95% CI(1.25-4.68), p=0.009), APRI greater

than 1 (H.R.=1.92, 95% CI(1.05-3.52), p=0.036) and 2nd recurrence occurring within 1 year (H.R.=2.69, 95% CI(1.61-4.49), p<0.001) were significantly associated with worse survival. The cumulative 1-, 3-, and 5-year 2nd recurrence rates were 38.8%, 77.9%, and 87.4% respectively. On univariate analysis, age greater than 65 years, an α-fetoprotein level greater than 20 ng/mL, APRI >1, m-ALBI grade 2b or 3, platelet count less than 150,000/ul, recurrent tumor number greater than 1 and IDR developing within 2 years were associated with higher risk of 2nd recurrence. On multivariate analysis, male gender (H.R.=1.47, 95% CI(1.01-1.97), p=0.01), age greater than 65 years (H.R.=1.72, 95% CI(1.28-2.30), p<0.001), an alpha fetoprotein level greater than 20ng/ml (H.R.=1.41, 95% CI(1.07-1.85), p=0.016), surgical treatment for recurrent HCC (H.R.=0.25, 95% CI(0.10-0.68), p=0.007), tumor number greater than 1 (H.R.=1.35, 95% CI(1.01-1.81), p=0.046), and IDR developing within 2 years (H.R.=1.67, 95% CI(1.24-2.24), p=0.001) were prognostic factors for 2nd recurrence.

結論:

Our study suggested that presence of end-stage renal disease, m-ALBI grades 2 and 3, APRI >1 and time to 2nd HCC recurrence were all associated with overall survival while the 2nd HCC recurrence was associated with male gender, age ≥65 years, α-fetoprotein level >20 ng/mL, non-surgical therapy, time to IDR, and tumor number> 1.