

中文題目：肝臟發炎性生物指標對預測可接受手術切除之肝細胞癌病患長期預後之探討

英文題目：The Impact Of Hepatic Inflammation Biomarkers On Long-term Outcome In Patients With Resectable Hepatocellular Carcinoma

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Background : Infiltrations of inflammatory hepatocyte and unregulated cytokines in liver tumors are frequently present, suggesting strong associations between hepatic inflammation and tumor genesis. In addition, hepatic inflammation may be associated with HCC long-term survival for patients receiving curative treatment. Therefore, accurate evaluation of hepatic inflammation severity is helpful to predict long-term survival for patients receiving curative treatment.

Aims : This retrospective study aimed to evaluate the association of non-invasive hepatic inflammatory biomarkers and long-term survival in patients receiving curative tumor ablation or resection.

Methods : A total of 206 cases with resectable HCC patients treated with curative tumor ablation or resection were recruited from Ren-Ai branch, Taipei City hospital during period from January 1998 to June 2013. Baseline characteristics and factors associated with long-term survival were analyzed. Non-invasive hepatic inflammatory biomarkers, APRI and FIB-4, were calculated automatically with the published formula.

Results : The demographic and clinical characteristics were listed in Table 1. The 1-year to 5-year overall cumulative survival rates were 82%, 68.4%, 56.8%, 49.5% and 41.7% [median: 46 months]. Multivariate Cox regression analysis revealed that CTP class B/C cirrhosis [hazard ratio (HR): 2.4, 95% CI:1.09-5.27, P=0.03], Tumor size >3 cm [HR: 2.19, 95% CI:1.43-3.33, P=0.0003], serum AFP levels > 400 ng/ml [HR: 1.73, 95% CI:1.09-2.72, P=0.019],and FIB-4>2.333 [HR: 2.61, 95% CI:1.47 -

4.65, P=0.001] were independently associated with long-term survival (Table 2).

Patients with lower APRI (≤ 0.748) or FIB-4 (≤ 2.333) had significantly higher 1-, 3-, and 5-year cumulative survival rates compared with those having higher APRI > 0.748 (90.1%, 63.4%, 43.6% vs. 73.5%, 49%, 39.2%, P=0.0023) or FIB-4 > 2.333 (89.2%, 68.9%, 50.0% vs. 77.5%, 48.8%, 36.4%, P=0.0002)(Fig 1.)

Conclusions : Our study indicated that CTP class B/C cirrhosis, Tumor size > 3 cm, serum AFP levels > 400 ng/ml, and FIB-4 > 2.333 were independently associated with long-term survival. The APRI and FIB-4 represents a simple approach to the assessment of liver inflammation in patients with HCC. Hepatic inflammation scores provide a risk stratification for resectable HCC patients receiving curative treatment.