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## Adjuvant Hepatic Arterial Infusional Chemotherapy after Curative Resection of Hepatocellular Carcinoma: A Prospective Randomized Study

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**Background and Aim:** Several adjuvant therapies had been tried in attempt to primarily reduce uni-centric, intra- or extrahepatic recurrence after curative surgical resection for hepatocellular carcinoma (HCC). However, the efficacy of adjuvant therapy after curative resection is still unknown. In this prospective study, we intended to determine whether adjuvant hepatic arterial infusional chemotherapy with 5-FU and cisplatin could reduce the incidence of recurrence of HCC after curative resection.

**Methods:** This prospective randomized trial recruited HCC patients for 4 cycles of adjuvant intra-arterial chemotherapy with 5-FU and cisplatin via chemoport between January 2006 and December 2008. The patients were randomized to adjuvant therapy or observation after curative resection. If the patient refused to receive adjuvant therapy, he was allocated to observation group.

**Results:** Between adjuvant group (n=31) and observation group (n=104), there was no difference in tumor characteristics, such as distribution of TNM stage, pathologic differentiation, portal vein invasion, and microscopic invasion. During the follow-up, recurrence developed in 11 (35.5%) and 40 (38.5%) patients in each group (p=0.84). There was no difference in the distribution of intra- or extrahepatic recurrence between the two groups (p=0.163). Tumor progression after recurrence was the cause of death in 2 (28.6%) and 8 (34.8%) patients in each group (p=0.94). The 3-yr cumulative survival rate was 80% in adjuvant group and 78% in observation group (p=0.98). The median recurrence-free survival rate was 10.5 months in adjuvant group and 11.9 months (p=0.80).

**Conclusion:** Our data show that adjuvant hepatic arterial infusional chemotherapy with 5-FU and cisplatin did not offer any beneficial effect on the prevention of recurrence after curative resection of HCC.