

中文題目：非酒精性脂肪性肝炎在台灣患者之病理進程：配對肝組織切片之追蹤研究

英文題目：Histological Course of Non-alcoholic Steatohepatitis in Taiwanese Patients: A Longitudinal Study of Paired Liver Biopsies

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Background/Aims

Non-alcoholic steatohepatitis (NASH) may progress to fibrosis, cirrhosis and increases risk of hepatocellular carcinoma, but the supporting evidence is from indirect data and the natural history is not fully understood in Taiwanese populations. The goal of this study was to investigate disease progression in NASH patients by serial liver biopsies and to examine which clinical factors may contribute to the changes.

Methods

From June 2001 to February 2010, 64 patients were diagnosed with NASH by liver biopsy in Kaohsiung Medical University Hospital and local hospital. Of the 64 patients, 10 patients without medication treatment had received consecutive liver biopsies. The histopathological changes were examined and scored by experienced hepatopathologist. The non-alcoholic fatty liver disease (NAFLD) activity score, steatosis, activity, and fibrosis (SAF) score, and fibrosis stage were calculated. The changes of clinical parameters were also analyzed.

Results

The median follow-up time was 28.8 months (range 8-93 months). Of the ten patients, seven (70%) had progressive disease of steatohepatitis according to SAF score, two (20%) had stable disease and one (10%) had improved disease. Of the clinical parameters, the reduction in body mass index and waist circumferences were associated with non-progression disease activity. The one patient with improved disease activity according to SAF score had marked body weight loss during two biopsies, though the fibrosis stage remained the same. One of the patients with high SAF score (9 to 10) and fibrosis stage (3 to 4) had hepatocellular carcinoma (HCC) developed after the second biopsy. Three patients developed diabetes mellitus during the period of follow-up and thus all patients had diagnosed with diabetes eventually.

Conclusions

Non-alcoholic steatohepatitis is a progressive disease in Taiwanese patient. Diagnosis of

non-alcoholic steatohepatitis by liver biopsy is important because it may predict further liver fibrosis, cirrhosis and risk of hepatocellular carcinoma development. Reduction of body weight, waist circumference and closely monitor should be incorporated into patient education programs.