

中文題目：肝硬化病患與罹患腦膿瘍之相關性：人口資料庫之回溯性研究

英文題目：The Risk for Brain abscess in Cirrhotic Patients: A Population-Based 3 Year Follow-Up Study

作者：陳彥均 洪宗興

服務單位：佛教大林慈濟醫院內科部

Background: The brain abscess in cirrhotic patients was rarely reported. The purpose of this study was to identify the risk of brain abscess among cirrhotic patients.

Materials and Methods: The National Health Insurance Database, derived from the Taiwan National Health Insurance program, was used to collect data from 40,878 patients with cirrhosis and 40,896 randomly selected age- and sex-matched patients during a 3-year period following initial hospitalization. This retrospective study included patients who were discharged with the main or accessory diagnosis of cirrhosis (ICD-9-CM code 571.5, or 571.2 in the database) between January 1, 2004 and December 31, 2004. Patient who was admitted before January 1, 2004 were not included. Complicated liver cirrhosis was defined as refractory ascites, episodes of esophageal/gastric variceal bleeding, or hepatic encephalopathy. To exclude the congenital-anomaly-related liver cirrhosis, patients <30 years old were not included. Because of the different mechanism of liver cirrhosis, cases of biliary cirrhosis (ICD-9-CM code 571.6) were not included. Patients with incomplete or missing basic data in the database were also excluded.

A total of 40,878 cirrhotic patients without baseline brain abscess were enrolled. The reference group was composed of 40,896 randomly selected sex- and age-matched patients. Individually, each patient (n=81,774) was followed for a 3-year period starting from their first hospitalization until diagnosis of brain abscess (ICD-9-CM codes 324).

Result: A total of 143 patients (0.17%) were diagnosed with brain abscess during the 3-year follow-up period. Of these, 94 (0.23%) were the cirrhotic patients and 49 (0.12%) were non-cirrhotic patients ($p<0.001$). After regression analysis, the cirrhotic patients had a higher risk of brain abscess than the non-cirrhotic patients during the 3-year follow-up period (hazard ratio: 1.86; 95% confidence interval: 1.29-2.69; $p=0.001$). The risk of brain abscess was higher in complicated cirrhotic patients than non-complicated cirrhotic patients (adjusted hazard ratio: 2.07; 95% confidence interval: 1.37–3.15; $p=0.001$).

Conclusion: Cirrhotic patients have a higher risk for brain abscess compared with the non-cirrhotic patients, especially patients with complicated cirrhosis.