中文題目:代償性肝硬化病人併發上消化道出血經內視鏡止血治療後預防性抗生素的角色 英文題目: The role of antibiotics in upper gastrointestinal bleeding among cirrhotic patients without major complications after endoscopic hemostasis

作者:吳宣鋒<sup>1</sup>,吳鎮琨<sup>1,2</sup>,楊世正<sup>1</sup>,戴維震<sup>1,2</sup>,梁志明<sup>1</sup>,許茜甯<sup>3</sup>,胡琮輝<sup>1,2</sup>,蔡成枝<sup>1,2</sup> 服務單位:<sup>1</sup>高雄長庚醫院內科部,<sup>2</sup>高雄長庚醫院內科部胃腸肝膽系<sup>3</sup>高雄長庚醫院藥劑部

## Background:

Antibiotic prophylaxis should be instituted for cirrhotic patients with upper gastrointestinal bleeding (UGIB) but the benefit on compensated patients remains undetermined. We aimed to compare the clinical outcomes between cirrhotic patients without major complications with UGIB with and without antibiotic prophylaxis. Recently, the issue on the beneficial role of antibiotic prophylaxis in compensated cirrhotic patients with UGIB began to be doubted under the concept of low risk of bacterial infection and mortality rate in this cohort.

## Method:

We conducted this population-based cohort study by using Taiwanese Longitudinal Health Insurance Database 2000 (LHID 2000, between 1997 to 2013), aged 18 years or older with a hospital discharge diagnosis of cirrhosis (n=64,506), UGIB (n=7,784) and endoscopic therapy (n=2,292). After strict exclusions, 1205 patients were enrolled and were divided into antibiotic exposure (n=558) and non-exposure (n=647) groups. The outcomes were re-bleeding and mortality.

## Results:

After competing analysis adjusted by death, the rebleeding rates within 4 weeks was significant lower in patients with antibiotic prophylaxis (3.05% versus 6.03%, p= 0.0142) and those with endoscopic therapy (0.72% versus 3.09%, p=0.0033) but not significant after 3 months and onwards. Patients with characters of age  $\geq$  55, high CCI score  $\geq$  4 and longer length of stay > 7 were benefited from re-bleeding. The use of antibiotics did not significantly impact 6-week mortality (aHR: 1.07, 95%CI: 0.41~2.75; p=0.8943). Old age, multiple comorbidities and and UGIB of variceal etiologies were risk factors of all-cause mortality.

## **Conclusions:**

Current study suggested that cirrhotic patients without major complications who suffered from UGIB were benefited by the use of antibiotics to prevent re-bleeding within 4 weeks after endoscopic treatment of UGIB especially those with age ≥ 55, high CCI score ≥ 4 and longer length of stay > 7 days. More prospective randomized studies are needed in future to clarify the issue of proposal not to administer prophylactic antibiotics to in compensated cirrhotic patients with UGIB under the concept of low risks of bacterial infection and mortality rate.