

# The factors affect antipsychotics choice in patients with ischemic stroke in Taiwan

Hao-Wen Chan (詹皓文)<sup>1</sup>, Chien-Chou Su (蘇建州)<sup>1</sup>, Yea-Huei Kao Yang (高雅慧)<sup>1\*</sup>

Institute of Clinical Pharmacy and Pharmaceutical Sciences, College of Medicine, NCKU<sup>1</sup>

**Introduction** Psychological complication is one of major problems to affect recovery after a stroke, which may also lead to a higher mortality risk in post-ischemic stroke patients. Antipsychotics are generally recommended as first-line therapy to manage the psychotic symptoms. However, the safety information regarding antipsychotics use in stroke patients is limited. Therefore, to explore the prescribing decisions of antipsychotics would be needed and we aimed to analyze the prescribing pattern of antipsychotics in post-ischemic stroke patients.

**Material and method** Electronic health data set for this study were derived from National Health Insurance Research Database (NHIRD) from 1<sup>st</sup> Jan 2000 through 31<sup>st</sup> Dec 2013. The population included adult patients with ischemic stroke event who start to receive outpatient antipsychotics treatment within 180 days after stroke event and had no antipsychotics prescription within 1-year prior to antipsychotics treatment. Eligible patients were grouped into five groups (quetiapine, haloperidol, risperidone, chlorpromazine and sulpiride) and we set risperidone as reference group. We analyzed factors influencing antipsychotics choice by using multiple logistic regressions.

**Results and discussion** There were 11,972 eligible patients for this study. The results revealed elderly patients with dementia and delirium, the physicians were more likely prescribe risperidone, while patients had depression (OR=1.22; 95%CI 1.06-1.41), the physicians were likely to prescribe quetiapine for treating post-ischemic stroke psychosis. In addition, when patients had cardio-metabolic syndromes, the physicians were more likely prescribe first-generation antipsychotics for patients.

**Conclusion** This study provided evidence-based information to clinical practice for post-stroke patients using antipsychotics. The selection of antipsychotics in post stroke patients is associated with previous psychiatric disorders and further investigation on the safety information is warranted.