

中文題目：無呼吸中止症之睡眠障礙與事故傷害之13年全國性追蹤研究

英文題目：Non apnea sleep disorder associates with higher risk of injuries- A 13-year follow up nationwide population-based cohort study

王一多<sup>1</sup>; 簡戊鑑<sup>2</sup>; 鍾其祥<sup>3</sup>; 簡志峰<sup>1</sup>; 張山岳<sup>1</sup>; 彭忠衍<sup>1</sup>

<sup>1</sup> 三軍總醫院胸腔內科; <sup>2</sup> 國防醫學院公衛系; <sup>3</sup> 三軍總醫院醫學研究室

**Study Objectives:** Sleep problems are well known risk factors for road accidents. However, studies regarding sleep disorders and injuries are rare and lack of systemic studies. Our study aimed to determine whether non apnea sleep disorder (NASD) increases the risk of injuries.

**Methods:** We utilized outpatient and inpatient data from the Longitudinal Health Insurance Database (LHID) between 2000 and 2013 in Taiwan. We enrolled 7,671 patients above 20 years old diagnosed with NASD as outpatients  $\geq 3$  times or hospitalized. We calculated risks and incidence ratios of injuries in patients with NASD compared with the general population. The cumulative incidence of NASD and the subsequent risk of injuries are assessed by the Kaplan-Meier method and Cox regression using a matched comparison cohort of injured patients without NASD.

**Results:** The incidence rate of injuries in the NASD group is 3122.76 per  $10^5$  person-years. The NASD cohort has an adjusted hazard ratio (HR) of injuries 29.6% higher than that of the cohort without NASD. Females are dominant in our studies; however male patients with NASD have higher risk of injuries compared to female (adjusted HR 1.397 in male and 1.204 in female; both  $p < 0.001$ ).

**Conclusions:** Our study provide the largest nationwide population based data to date showing the association between non apnea sleep disorder and higher risk of injuries.

**Key words:** Non-apnea sleep disorder; Injuries; Taiwan National Health Insurance Research Database; Longitudinal Health Insurance Database