

The association of hypnotics use and the risk of new-onset stroke in Taiwan: A population-based cohort study

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Background: The prevalence of insomnia in Taiwan is 11.3%, and the number of people using sedative hypnotics in 2018 has exceeded 4 million. Therefore, it is important whether hypnotics are associated with other diseases.

Aim: Cerebrovascular disease has been ranked among the top 10 causes of death in Taiwan for many years, but the association of hypnotics use and the risk of new-onset stroke is still unclear now. The aim of this study is to evaluate it.

Methods: The retrospective cohort study based on data from the National Health Insurance Research Database (NHIRD), and we included all patients aged 40 to 90 in 2004. After a series of exclusions, the remaining 122,488 people as the study group and followed up to December 31, 2013. The 1:1 propensity score method was used to match by age, sex and we measure the effect of hypnotics by Cox proportional hazards regression and Kaplan-Meier survival curves to compare with different kinds of hypnotics and strokes.

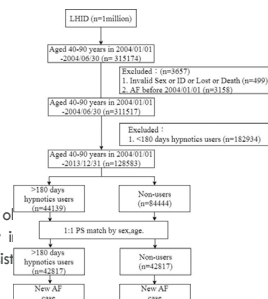
Results: Patients in the hypnotics group would significantly increase the risk of stroke (HR=1.64; 95% CI, 1.56-1.72). If classified by drug types, both BZD (HR=1.60; 95% CI, 1.50-1.71) and Z-Drug (HR =1.45; 95% CI, 1.29-1.63) were also increase risk; In addition, long-term use of hypnotic increase the risk of ischemic stroke (HR=1.63; 95% CI, 1.54-

1.73). However, we did not found a significantly increase risk between hypnotics and hemorrhagic stroke (HR=1.07; 95% CI, 0.80-1.45).

Conclusion: We found that long-term use of hypnotics increases the risk of stroke, especially ischemic stroke.

Biography

Chen-Feng Ho has of Medical University in pharmacy and assist students.



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