

中文題目:吸入性類固醇和肺結核的風險

英文題目: Inhaled Corticosteroids and the Risk of Pulmonary Tuberculosis

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Background: Inhaled corticosteroids (ICS) are commonly used for the treatment of asthma and chronic obstructive pulmonary disease. However, the studies on the relationship between ICS use and pulmonary tuberculosis (TB) development are limited. We conducted a population-based case control study to investigate whether ICS use increases the risk of developing TB.

Methods: We used the Longitudinal Health Insurance Database in Taiwan between 2002 and 2010. The TB patients who were 18 years and older received medical care at least 3 times, including outpatient visits and hospitalizations, for a principal diagnosis of TB (ICD-9-CM codes 011-018). The date of TB diagnosis served as the index date. Each TB patient was frequency matched to 4 control patients according to age, sex, and index year. We retrospectively followed up the medications and comorbid medical conditions for the 5 years prior to the index date. We calculated the odds ratios (ORs) and 95% confidence intervals (CIs) of TB development using multiple logistic regression models.

Results: Most of the study participants were men (68.7%), and the mean age among the 8091 TB patients and 32 364 comparison participants was 61.3 ± 18.6 years. After adjusting for potential covariates, ICS use caused a 2.04-fold increased risk of developing TB (adjusted OR: 2.04, 95% CI: 1.78–2.33). When considering dose response and adjusting for potential covariates, ICS and oral corticosteroids (OCS) use remained independent risk factors and exhibited a dose response relationship of TB development. The multiplicative increased risk of TB was also significant in patients using ICSs and OCSs compared with patients not using ICSs and OCSs (adjusted OR: 4.31, 95% CI: 3.39–5.49). Previous TB history exhibited the greatest risk of TB development among the comorbidities (adjusted OR: 8.50, 95% CI: 7.52–9.61).

Conclusion: Long-term ICS use may increase the risk of TB development.