

中文題目：慢性疼痛與甲狀腺失調之關連性：一個全國性研究

英文題目：Association between chronic pain and thyroid dysfunction: a nationwide population-based cohort study

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Background: Thyroid function may be affected by the catecholamine secretion due to chronic pain (CP); however, this issue is still unclear in the literature. Therefore, this nationwide population-based cohort study was conducted clarify it.

Methods: Using the Taiwan National Health Insurance Research Database, we identified participants with CP and participants without CP matched at 1:2 ratio by age subgroup, sex, and index date between 2000 and 2013. The competing risk survival analysis was performed to compare the risk for thyroid dysfunction, including hypothyroidism and hyperthyroidism, between the two cohorts by following up until 2013.

Results: We identified 21018 participants with CP and 42036 participants without CP for this study. In the participants with CP, the mean age (\pm SD) and male ratio were 72.34 (\pm 6.04) years and 49.20%. Prevalence of rheumatoid arthritis, connective tissue disease, vitiligo, psoriasis, hypertension, diabetes, hyperlipidemia, drug abuse, and mental disorder were higher in the participants with CP than in those without (all p-values <0.001). Compared to participants without CP, those with CP had an increased risk for thyroid dysfunction after adjusting for rheumatoid arthritis, connective tissue disease, vitiligo, psoriasis, hypertension, diabetes, hyperlipidemia, drug abuse, and mental disorder (adjusted hazard ratio [AHR]: 1.49; 95% confidence interval [CI]: 1.31–1.69). Stratified analyses showed the increased risk was persistent even following up for more than 2 years (AHR: 1.34; 95% CI: 1.16–1.55).

Conclusion: CP may increase the risk of thyroid dysfunction even after following up for more than 2 years. Further studies about the mechanisms and validation of the results are warranted in the future.