

抽菸對於成人尿酸的影響

The Association Between Uric Acid and Cigarette Smoking in Chinese Adults

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Background : The purpose of this study was to examine the effect of cigarette smoking on plasma uric acid concentration in Chinese adults and to determine the correlation between this parameter and other life styles.

Methods : This study was conducted on 1094 subjects; 830 of them were nonsmokers (280 men and 550 women) aged 40 – 87 years, 155 were current smokers (139 men and 16 women) aged 40–84 years, and 109 were previous smokers, with a mean 6.6 years follow-up. Uric acid (hyperuricemia was defined as $\geq 6.5\text{mg/dL}$ for female; and $\geq 7.5\text{mg/dL}$ for male), lifestyles (smoking, drinking, betel nut chewing or exercise) were documented. Bivariate regression logistic analyses were constructed for the model development.

Results : At baseline, the level of uric acid were normal in the 878 individuals. The prevalence of hyperuricemia is significantly lower in current smokers than in nonsmokers ($\text{Exp(B)}=0.489$, $p = 0.023$) when follow-up. A statistically significant negative correlation was noted between the smoking status parameters, including both the number of cigarettes smoked-year ($\text{Exp(B)}=0.126$; $p = 0.003$) and the amount of cigarette smoked ($\text{Exp(B)}=0.089$; $p = 0.02$), and hyperuricemia.

Conclusion : There were some Western studies identifying the association of smoking and lower uric acid level; however, our study discovered this trend on Chinese adults. Therefore, cigarette smoking was associated with lower prevalence and incidence of hyperuricemia in Chinese. The mechanisms linking smoking and low plasma uric acid need to be addressed.