

Molecular epidemiological study on tobacco water-pipe smoking and the risk of stomach cancer

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Types of tobacco



water-pipe tobacco

Existing tobacco of *Nicotiana rustica* in Viet Nam that contains about 10 times the nicotine of *Nicotiana tabacum* made cigarette (9% versus 1-3%), it was reflected that concentration of substances in *Nicotiana rustica* in Viet Nam might be higher than that in *Nicotiana tabacum*



Results

Water-pipe smoking habits	Risk of stomach cancer
Water-pipe smoker	OR=3.04, 95% CI=1.75-5.28
plus daily alcohol drinking	OR=1.79, 95% CI=1.19-2.70
plus CYP1A1 of A/G or G/G genotypes	OR=7.81, 95% CI=2.06-29.51

Smoking status

- Male smoker: 75.76%
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 - Current smoker: 44.37%
 - **single water-pipe smoker 12.99%**
 - **water-pipe plus cigarette 10.61%**
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 - Former smoker 31.39%


Methods

controls matched by sex and age +/- 5.

Antibodies for *Helicobacter pylori* and CYP1A1 (genotypes A/A, A/G, G/G) were examined.



Smoking habits were determined by types of
used tobacco. Grouped data logistic life-time
regression analysis was performed using
STATA 10.0. Grouped data logistic-
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Tobacco was burned in 9500C, substances were generated to be 3,800 types of chemicals included carcinogens.

Conclusions

- Tobacco water-pipe induced significantly risk of stomach cancer and it was interaction with alcohol drinking and CYP1A1 genotypes